CULTIVATING COLLABORATIVE CAPACITY
A brief

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March, 2006

Organisations need to collaborate both within and across organisational boundaries in order to meet contemporary competitive, innovative, social and economic goals. This brief lays the groundwork for a discussion on building and sustaining collaborative capability. It explores the meaning, the core characteristics, the importance and the challenges of "collaboration" in organisational settings. In addition, it discusses a selection of practices from fields such as new product development, conflict management, negotiation, positive organisational theory, interdisciplinary studies and computer-supported collaborative work, which might inform and facilitate collaborative initiatives.

Introduction

A perennial interest and concern of the LILA community is the ability of organisational members to work together effectively and flexibly so that relevant knowledge and skill can be accessed and applied in a timely fashion wherever it is needed. For example, LILA member Pfizer points to an emerging need for its R&D, Commercial and Manufacturing members to collaboratively evaluate products from the combined perspectives of scientific potential, market viability and the business-line portfolio in order to prioritise and streamline product launches. At the country level, medical, marketing and sales personnel also need to work collectively on product portfolios to make effective budget decisions, prioritise focus and allocate resources. Another LILA member, the US Army, sees value in cultivating collaboration among the many Army communities sharing critical knowledge and practices among their respective members, but wonders how to sustain the trust and confidence supporting that sharing within each community.

Why this attention to collaborative activity? First, the complicated nature of many of our contemporary problems and concerns means that we need to engage people who can contribute different skills, expertise and perspectives to the problem at hand. As James Surowiecki demonstrates in his recent book, "The Wisdom of Crowds," groups of people (often large groups of people) are almost always smarter than an elite few in making wise decisions, solving sticky problems and fostering innovation (Surowiecki 2005). Second, the differentiated nature of our organisations—such as by function, department, market segment, region, product group, business line, sector and so forth—means that we need to draw the necessary diversity of expertise, skill and perspective from people who do not routinely work together. Yet, since working and exchanging knowledge creatively and effectively across "differences" of various kinds doesn't seem to come naturally, organisational leaders seek ways to consciously create contexts, promote mindsets, and build skillsets to enhance capacity in this domain.

In preparation for a discussion of "cultivating collaborative capacity" this brief introduces some key concepts around the topic. Framing questions for this brief include the following:

- What do we mean when we talk about "collaboration" in organisational settings?
- How can we characterise collaborations in meaningful ways that enable us to analyse, evaluate and

possibly emulate them?

- Why is collaboration in organisational contexts both compelling and challenging?
- What general approaches and specific actions can promote and enhance collaborative activity in various situations?

What is Collaborative Capacity?

The dictionary defines collaboration as the act of working jointly, especially in an intellectual effort or endeavour. Since organisations exist primarily to enable joint effort or joint work, we often mean something rather more specific when we refer to collaboration in organisational contexts. For instance, we often label as "collaboration" joint activity among parties who don't work together routinely within the current organisational structure, such as members from different departments, different functions, or different regions.

Digging further into definitions, we find other terms that describe aspects of joint work or joint effort. For instance, cooperation refers to joint activity characterised by informal tradeoffs and emergent reciprocity when rules may be absent. For instance, students might cooperate in preparing for an exam together. There is no formal or institutional structure and each is working toward his/her own goal of getting a good grade, but their exchanges of information can be mutually supportive. Coordination highlights activity within formal and institutionalised interdependencies (or relationships) that may still lack a shared interest or goal. Systems and structures that enable efficient sharing of resources, such as a scheduling roster for equipment or a conference room, provide examples of coordination. Despite having separate projects and goals, each party benefits from the structure to coordinate its activities with the larger organisation. In contrast, collaboration addresses either emergent or planned joint activity where an overarching shared goal engenders a degree of both cooperative and coordinative joint activity that leverages knowledge rather than simply moves information.

Characteristics of Collaborations

Reference to "collaboration" in different domains usually highlights elements of novelty or creativity, and the involvement of multiple stakeholders with diverse perspectives. In new product development, Jassawalla and Sashittal (1998) define collaboration as the "coming together of diverse interests and people to achieve a common purpose via interactions, information sharing, and coordination of activities." They write: "Although many terms, including interaction, coordination, integration, and cooperation, have commonly referred to linkages among people and departments… collaboration has recently emerged as a popular metaphor for describing a more complex, more productive linkage" (Jassawalla and Sashittal 1999, p. 51). In writing about technology-supported group work, Schrage notes that collaboration occurs "through a purposive relationship when there is a desire or need to solve a problem, to create, or to discover something within a set of constraints" (Schrage 1990, p. 36). In the Conflict Management literature, collaboration refers to a method by which competing interests reach win-win outcomes. Collaboration is a process

> **Characteristics of Collaborations**
> - Target complex problem / novel situation
> - Acknowledge multiple stakeholders
> - Engage diverse perspectives
> - Operate under constraints
> - Require creative response
> - Seek mutual solution / overarching goal

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in which those parties with a stake in the solution actively seek a mutually determined solution (Gray 1989).

Collaborations can be intentional and planned for, or emergent and fortuitous. For instance, an issue that is readily apparent can prompt intentional efforts to engage the different parties necessary to address it. On the other hand, previously unconnected parties may, through discovering each other, subsequently become aware of "problems" that they could jointly solve.

Levels of Collaboration

Collaborations exist on many different levels. Well-known collaborative partnerships include Crick and Watson who discovered the structure of DNA, or Marie and Pierre Curie who discovered new radioactive elements. Collaborative work occurs at the small group level, for instance in teams whose members have a shared responsibility for a specific task or output. Examples might include surgical teams who come together to deal with an acute patient situation (Edmondson, Bohmer et al. 2000), or customer account teams, involving various functional representatives, which attend to the various ongoing needs of large or key customers. The Swiss Federal Council, a 7-person executive body of the Swiss government, provides a unique example of group-level collaborative activity in a political context; its members assume leadership of the group—that is, the presidency—on a rotational basis. Collaborative activity can also occur at the community level when community members, who don't necessarily know each other personally, have a shared interest in a specific output. The development of Linux, for example, or perhaps the Wikipedia online, may be viewed as community-level collaborations.

Some of our complicated problems require intraorganisational engagement across various divisions, functions and/or disciplines, as in the Pfizer situation. Other complicated problems might require interorganisational involvement among similar or very different organisations. For example, problems such as the development of industry standards, technology protocols and codes of conduct might draw expertise and engagement from multiple representatives in the same field. The UN Peacekeeping forces, which combine their resources to achieve a mutual goal, represent examples of collaborations reaching across both organisational and national boundaries. Yet other problems might require interorganisational involvement by very different organisations. Joint ventures (JV) are one example: formalised arrangements through which (usually) two organisations define a shared goal, manage their relative contributions of expertise, and accommodate their different interests. Collaborative efforts to optimise value-chain activities might involve a business, its customers and its upstream suppliers. Effective responses to natural or manmade disasters necessarily require collaboration wherein various organisations supply complementary services and capabilities in a coordinated but sometimes improvised fashion.

Collaborative capacity is simply the ability to perform or produce in a collaborative fashion, the ease of which will vary according to the level or scale of collaboration sought. Moreover, the tools and techniques with which leaders can prepare or intervene will also differ.

Why the Imperative for Collaboration?

Research and experience suggest a number of related reasons for the current interest in collaborative capability in organisations.

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More complex problems

In a world of growing interdependence, we need to be able to effectively resolve ever more complex problems, which we might label "messes" or "wicked problems." Einstein observed that we can't solve problems by using the same kind of thinking that created those problems. Instead, finding creative solutions requires the ability to envision the problem from perspectives outside of our own (Gray 1989). Issues suited to collaboration can often be identified from having resisted resolution through the application of unilateral or overly-simple responses.

Ideal problems for collaboration manifest many of the following characteristics:

- They are ill-defined or there is disagreement on how they should be defined;
- There are many stakeholders with vested interests;
- There are perhaps stakeholders not necessarily identified *a priori*;
- There exists disparity of power and/or resources;
- There is a need for diversity of expertise;
- They are characterized by technical complexity;
- The presence of different perspectives has created adversarial relationships;
- Incremental approaches have yielded unsatisfactory solutions thus far.

Collaborative approaches engage diverse constituents in a collective effort that extends the intellectual and perceptual limitations of the original party or parties. Collaborative themes are prominent in fields of activity such as medicine, education, technology innovation, negotiation and conflict management, wherein socially and technically complex situations abound, and for which prior examples to guide behaviour or decisions are lacking.

Increasing specialisation across disciplines and fields

As the overall body of world knowledge increases exponentially, there are few, if any, people who, like Leonardo de Vinci, can be considered experts on a broad number of subjects. Instead, more and increasingly narrow knowledge domains have emerged, while academic disciplines break into sub-disciplines. Thus, in order to address big problems or be innovative on a grand scale, we need to involve diverse constituents to access the relevant breadth as well as depth of expertise. Geoffrey West, President of the Sante Fe Institute, interviewed in the March 2006 Harvard Business Review, notes that paradigm-shifting innovation can only emerge from an environment that encourages free thinking and risk-taking among and across multiple disciplines.

Constrained access to resources

In addition to the advantages of and needs for engaging different expertise, the rising costs of some resources such as advanced technologies or human specialists can trigger collaborative activity. Pressures to achieve lower costs and faster turnarounds also point to constraints on resources such as investment capital, market interest and time. Such pressures drive moves for various kinds and degrees of integration among different departments, sub-units or functions, as well as prompt companies to seek ways to interact more collaboratively with their customers and suppliers. Moreover, collaborative approaches can, especially in non-profit sectors, be particularly advantageous for gaining financial resources from external sources such as governments or foundations.

Development of new information and communications technology

Information and communications technology (ICT) enabling and enhancing group activities across time

and space point to new opportunities for collaboration among participants for whom it was previously infeasible to work together. Thus new ICTs are seen as unveiling new opportunities for collaboration. Furthermore, these technologies are also seen as a means to reduce organisational problems associated with the collaborative process within and among organisations, in that they can facilitate better coordination, enable more efficient communication, and support a shared memory of group decisions, tasks and outputs. Thus their availability is expected to encourage more attempts at collaboration.

Better awareness of stakeholders
Due to faster and more widespread access to information worldwide, there is the possibility to achieve better awareness of additional perspectives and related concerns, and even greater clarity on who really is a stakeholder in a problem or theme under consideration. Assuming that all stakeholders ultimately share an overarching goal, the achievement of which creates a better and more sustainable outcome, there should be more incentives and fewer excuses necessary for taking a collaborative approach.

Why is Collaboration Challenging?

Our general experience is that collaborations are not easy. It appears that the very diversity of expertise and perspective that makes a collaborative approach more viable than other ways of addressing some issues is also an underlying source of difficulties.

Inappropriate choices of tasks
LILA Director David Perkins highlights research noting that certain tasks lend themselves better to collaborative work, while others are hampered by collaboration (Perkins 2003). As noted earlier, many intellectual tasks such as decision-making, problem-solving and designing innovative outputs can really benefit from multiple minds. Yet it is often easier to pool physical effort, such as shovelling snow, while intellectual effort is usually more difficult to coordinate and thus more challenging when undertaken as a group. For instance, adding additional people to a shovelling task already in progress can speed up that task. On the other hand, adding people to a software development project in progress is more likely to delay than hasten its conclusion. Tasks that allow for additive effort, subdivision, or flexible involvement of specialised skills may benefit from a collaborative approach.

Resource mismatches
Even if a collaborative approach suits the task, the complexity of matching resources to the problem often leads to ineffective collaborations. For example, a large group (e.g. over 6-8 members) can help with an initial brainstorm, but can become problematic when trying to work through fine details. If the group fails to reconfigure itself to address subtasks in smaller groups, its productive power can decline despite the potential suggested by the resources involved.

Another resource mismatch problem prevalent in collective work results from social loafing, the decrease in individual effort due to the presence of others. Social loafing is encouraged by a lessened contingency between input and output —i.e. there is less accountability between an individual's contribution and overall productivity so people can get away with working less and can defer responsibility for a negative performance to others in the group. In cooperative situations, people often feel that it is "fair" to divide work evenly, so individuals will tend to work only as hard as they think others are working. This can result

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in a lowering of work standards, and a "good enough" attitude. Nevertheless, the benefits of working together on physical tasks, such as shovelling, can often offset social loafing effects. A true collaborative situation should be less subject to social loafing since all members should be invested in the mutual goal and it should make more sense and be less problematic to have participants with differentiated expertise contribute in different ways.

Knowledge differences
Different practices, functions, disciplines and other groupings by which we structure organisations develop different bodies of knowledge. They also learn different ways of making meaning.

Each group defines what constitutes relevant problems for itself, and may view another group's central issues as esoteric, or even meaningless. They use different methods for solving those problems, acknowledge different kinds of data and evaluate solutions according to different criteria. Thus different groups have different standards of legitimacy, acceptability and validation (Boix-Mansilla, Dillon et al. 2003; Carlile 2002; Dougherty 1992).

As a result, they struggle to communicate clearly or interpret communications accurately across these knowledge boundaries. Practices, disciplines, communities or thought worlds that start with different knowledge bases cannot easily share ideas because new understanding builds on previously accumulated understanding. Language and terminology acquired and used in the study and practice of one domain can hinder communication with others practicing beyond the boundaries of that domain. Different standards for appropriate methods and procedures for addressing problems may also lead groups to discount or reject each other's ideas, data and conclusions, even when they are expressed clearly. Such shortcomings in clear and coherent communications impact our ability to share information effectively. They thus undermine efforts and processes to establish perceptions of competency and commitment, and thereby build sufficient trust to work collaboratively.

Knowledge interdependencies
Knowledge developed within a practice, function or discipline can be dependent on, as well as have consequences for, the knowledge developed across other practices, functions or disciplines. For example, the development of commercially viable new products requires that both technological and market possibilities are linked effectively in the product's design. Recent research from the field of industrial relations (Heckscher and Adler 2006) highlights the need for a shared ethic of interdependent contribution to achieve collaboration. It notes, however, that many organisations retain remnants of bureaucratic management approaches, which sustain an uneasy mix of individualism and organisational loyalty rather than encourage recognition of real interdependencies. Ignorance of interdependencies among different parties can create coordination difficulties. New product development research has shown that organisational routine, often designed for efficiency, which prescribe narrow roles and limited relationships between different functions, can hinder real collaborative effort (Dougherty 1992).

Furthermore, it is worth noting that collaborative structures are dynamic, not static. As organisations innovate and compete, change is required and new or novel sources of difference and dependence emerge, and new consequences must be resolved again. New knowledge dependencies can change the

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relative power and status of different participating parties and thus change the extent of trust and effective knowledge exchange among them (Carlile 2002; Huxham and Vangen 2005; Levina 2005).

Organisational support
Other challenges to true collaboration can derive from the organisational context more generally, such as how effectively individuals are supported technologically in their communication and coordination with others, or how appropriately they are compensated for collaborative work with others.

It is likely that the degree of difficulty in dealing with these challenges is tied to the scale of collaborative activity. However, awareness of the inherent tensions involved in leveraging different sources and types of knowledge should enable participants to respond more effectively when difficulties arise in collaborative engagements. In the next section, we explore a variety of approaches that address these tensions more directly.

How can Leaders Cultivate Collaborative Capacity?

Drawing from a range of literatures, this section explores a selection of both general approaches, as well as specific actions, which can be used to:

- Design environments where collaborative activity can emerge with minimal hindrances, and
- Support particular participants in actual collaborative situations.

Some of these approaches or points of leverage work towards creating an environment or a framework within which collaboration can happen. They attempt to create conditions that shape both the physical and mental context from whence participants operate. An examination of contextual conditions can offer a "snapshot" or a status view of the environment influencing collaboration at any time.

Other approaches or points of leverage focus primarily on the interactions among the particular participants that enhance or impede their collaborative efforts. Such factors would not be apparent in a snapshot view of the organisation but would become evident through insider conversations and examination of the particular work process underway. The table on the next page summarises the points of leverage discussed in the following section and suggests how these elements are more or less important in different collaborative situations.

Collaborative Points of Leverage	Scale of collaboration		Stage of Collaboration	
	Micro (partnership, small group or community)	**Macro** (large community, organisational, inter-organisational)	**Incipient, emergent**	**Established, ongoing**
CREATING CONTEXT				
Encourage free thinking	**	***	***	**
Justify generalised trust	**	***	***	**
Facilitate access to others	***	***	***	**
Establish compelling goal	***	***	***	**
Assemble appropriate composition of expertise	***	**	***	**
Provide practical organisational support	***	**	***	**
DEVELOPING MINDSETS				
Encourage mindfulness of differences	***	**	***	*
Frame the issue	***	**	***	*
Promote psychological safety	***	~	**	**
BUILDING SKILLSETS				
Develop reflective interpersonal trust	***	*	***	**
Acknowledge and work with emotions	***	**	***	**
Develop helpful roles	**	**	**	*

KEY: *** Essential   ** Valuable   * Can be useful   ~ Not applicable

CREATING CONTEXT

Many sources in the literature can inform leader efforts to create a context where organisational members can engage in collaborative activity—whether spontaneous or by design—with minimal impediments.

Encourage free thinking:
In order to promote a generalised appreciation of and a tendency towards collaborative activity, it is

important for organisational leaders to cultivate an atmosphere that encourages free thinking and the exploration of ideas. Geoffrey West, President of the Sante Fe Institute, contends that, for collaborative activity to flourish, organisational members need to feel free to associate with others on open-ended, exploratory topics and feel comfortable airing novel ideas without fear of judgment or retribution.

Likewise, some flexibility in business practices can naturally facilitate the introduction of creative solutions to problems. On the contrary, West notes that collaborative capacity can often be inhibited by a focus on tightening business practices and improving efficiencies. LILA guest Peter Gloor points out that future success for companies will depend not just on streamlining business processes, but on optimising knowledge flows especially related to innovation processes (Gloor 2005). He argues that Collaborative Innovation Networks (COINs) are the most productive engines of innovation allowing businesses to build organisations that are more creative, productive and efficient, and suggests that leaders can successfully promote COINs by relinquishing central control and ceding autonomy and self-organisation to COIN participants.

An atmosphere of free thinking is particularly important to support incipient collaborations, especially on a large scale, but also plays a role in ongoing activities and within small groups.

Justify generalised trust:
Generalised trust is the expectation of an individual or a group that the word, promise, actions, or verbal or written statement of another individual or group can be relied upon. Generalised trust focuses on the situation and the role, rather than the particular individual in that role. For example, in a medical emergency, one is likely to trust the ER doctor to intervene appropriately, even though she isn't our primary care practitioner who we know and trust personally. When organisational members are "thrown together" as a result of their diverse expertise and charged with a common goal, or when engaged in large-scale collaborative efforts, they cannot initially (or perhaps ever) trust each other based on interpersonal knowledge of each other's competence and/or commitment. However, if they can trust in the situation and their roles, they are more likely to get working effectively, which will then enable them to establish interpersonal trust. Research on virtual teams, whose members were previously unknown to each other, shows that when team members develop "swift trust", assuming others' good intentions based on role and situation, they are able to develop the cohesion and connectedness necessary to produce effectively.

Leaders can promote justification in generalised trust by emphasising common goals and highlighting an overarching vision that is relevant to all parties. "Minimal group" experiments show that humans have an innate propensity to categorise ourselves and rapidly form group identities and perceptions of "us" and "them", based on the slightest signals of difference. Such perceptions may be particularly salient in interorganisational collaboration efforts, so it is essential for leaders to reinforce superordinate goals to which all parties can subscribe. Leaders also need to "walk the talk," showing through their own behaviour that they are committed to the shared vision and, in general, avoiding behaviours that lead others to distrust their leadership role.

Facilitate accessibility to others:
Both emergent and planned collaborative activity can be improved if participants have the best possible

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means to first, find each other in or beyond the organisation, and second, to stay in contact effectively.

Technological approaches to support awareness of potential collaborators might include searchable, electronic directories of specialist expertise. Electronic indices of facilities and equipment can also signal the presence of unique capabilities at certain locations. Disseminating organisational stories can further draw attention to unique or localised pockets of experience and expertise, which may be valuable to tap for future collaborative efforts. Since electronic expertise profiles usually offer little in the way of introduction, stories can ease approaches to work with or request help from others. Social approaches to enhance awareness of expertise around the organisation can include periodic inter-site visits, or "rotations" to create human bridges of firsthand experience that foster insight into practice-based knowledge from other sites and regions.

Established collaborators can be supported in their ongoing interactions by an increasing variety of electronic and other communication, coordination and information-processing tools. Gloor's research on COINs emphasises the importance of their direct-contact communication through the internet in helping them to self-organise. Leaders can help collaborative efforts avoid incurring disappointments and setbacks in the use of organisation-supplied tools by ensuring access to necessary training and technical support. Since tools and infrastructure (e.g. bandwidth or network speed) can often vary by location, leaders should also ensure that participants are aware of how these differences could impact collaborative interactions. Such awareness can help minimise misaligned expectations and possibilities for conflict as a result.

Establish compelling goal:
A clear and pressing goal is central to collaborative work. What the goal is and how it is framed can impact the quality of collaborative work. Harvard Professor Richard Hackman (2002) asserts that a compelling goal is simultaneously clear, challenging and consequential. If the goal is clear and well defined, but doesn't require excessive guidance, it sets up an optimal balance of specific ends with unspecific means. This situation helps to keep a group focused while letting it remain open to creative solutions. A challenging goal, slightly beyond the current capabilities of the group but still within reach, can enhance motivation. A consequential goal means that participants feel their task has significance and impact. It thus engages people and encourages full use of the talent and knowledge of the group. Csikzentmihalyi's research on "flow" (1990) also highlights the importance of a sufficiently challenging goal that optimally balances effort and capability, in order to sustain engagement and promote learning.

Similarly, Gloor also notes that COINs organise around a mutual and compelling goal that motivates individuals to work outside of organisational boundaries and across conventional hierarchies, creating and sharing knowledge that enables them to innovate together as a synergistic team.

Assemble appropriate expertise:
Designed or emergent collaborative groups need to have the appropriate mix of skills, knowledge and expertise necessary to address their shared goal. In his work on teams, Hackman asserts that leaders should attend firstly to task-related skills when composing teams, but they should also consider the interpersonal skills of team members. Although Surowiecki notes that large groups usually yield the necessary diversity of perspectives that makes for better decisions, choices or predictions, appropriate

composition of expertise involves recognition that "more is not always better." Furthermore, leaders need to attend to having a sufficient but not excessive heterogeneity of talents and perspectives, a balance most likely to promote learning and real collaboration.

In his work with self-organising collaborative networks, Gloor notes that they work partly because they have the flexibility and the means to connect with appropriately knowledgeable individuals as needed. Critical to their development and success, however, is the presence of an influential leader who combines emotional intelligence with creativity, using enthusiasm and persuasion to gather other motivated individuals who help move the innovation forward. Leaders can be on the lookout for such individuals to ensure that they experience the necessary freedom and flexibility to lead collaborative networks.

Provide practical support:
There are a number of ways that leaders can promote and encourage collaboration by providing support in very practical ways, such as providing information, education and other resources in a timely fashion. Hackman notes firstly that it is important for any group to have access to the resources and materials they need to complete the task. By contrast, the lack or the uneven distribution of essential resources can trigger insecurity, defensiveness and conflict among group members and also undermine their trust in the organisation. Second, it is important for a group to have access to the critical knowledge and information needed to reach its goal. Third, groups should have access to expert assistance and training. This ensures that they'll have the necessary skills and expertise to reach their goals. Finally, the reward system should be set up to recognise collective effort and contingent on collective, rather than individual, performance. Collective reward systems can be very difficult to introduce and sustain in certain fields, such as investment banking, which are used to rewarding individual "star performers" with highly lucrative bonuses and in which individuals are strongly conditioned to go after those substantial rewards. If leaders are truly committed to building collaborative capacity, they need to be creative and resourceful in developing methods to evaluate and acknowledge collaborative work and to compensate that work accordingly.

DEVELOPING MINDSETS
In addition to the more structural points of leverage mentioned above, there are also interpersonal and intrapersonal capacities that facilitate collaboration. Any group has an interpersonal climate that impacts how effectively its members work together. A feeling of safety and mutual trust, an appreciation and understanding of the emotional dimension of the group, and the ability to deal with tension and conflict all contribute to the development of collaborative capabilities and set the tone of the group.

Encourage mindfulness and appreciation of subtle differences:
Functional divisions are so engrained in the structure of most organisations that organisational members are generally aware—if not always comfortable with the fact—that members from different functions bring different priorities, skills, knowledge and toolsets to the collaborative effort. However, they are often less aware of more subtle differences—and hence the possibilities for unintended conflict—engendered by different localities, career trajectories, tenures and past experiences. It is the leaders' responsibility to frame the collaboration in terms that clarify why the different skills and perspectives of all participants are essential to the collaborative goal. Leaders can also create opportunities and exercises

at the beginning of collaborative programs, designed to surface some of the hidden diversity among participants.

Recent work by Roger Fisher and Dan Shapiro of Harvard University (2005) highlights how the expression of appreciation of another perspective, even if one disagrees with it, can go a long way in reducing tension and promoting positive attitudes. Leaders can model appreciation of difference in demonstrating that they understand and value the perspectives and interests of others, and by clearly communicating this understanding.

Frame the issue:
How leaders frame an issue at stake can significantly shape how effectively participants are able to work together to address it. For example, conflict management and negotiation research suggests that participants can be primed to see their roles and perspectives as complementary rather than competitive. Furthermore, when parties are encouraged to participate from interests rather than positions, the group is more likely to make satisfactory headway on issues.

William Ury, from the Program on Negotiation at Harvard Law School, offers an additional perspective that can help particularly with conflict and tension (Ury 1991). He proposes that, rather than seeing a situation or even a conflict as existing between only two sides, it is possible to assume a more comprehensive view, which he calls the Third Side. This is a perspective inclusive of both sides of the issue, which is at the same time able to see beyond these two points of view. Leaders and other organisational members—even those outside an existing collaborative effort—can develop this wider perspective, sometimes called "going to the balcony," by stepping back from the narrow view of the two parties and taking an outlook from "above." It is not so much a third, oppositional perspective as it is a more inclusive or comprehensive perspective. The value of this perspective is that it not only acknowledges both sides but that it enlarges the frame to reveal the "observer's" own role in the situation. In taking responsibility for one's relationship to the situation, a leader is better able to help resolve tensions arising during collaborative activities.

Promote psychological safety:
Harvard Professor Amy Edmondson offers the concept of "psychological safety" as another explanation of how the interpersonal climate of a group shapes collaborative potential. Edmondson defines psychological safety as an "individual's perceptions about the consequences of interpersonal risks in their work environment" (Edmondson 2003). Psychological safety is a pervasive feeling experienced by all members of a group addressing how actions such as speaking up, reporting errors, asking questions and seeking help, will be judged by the group.

When group members experience psychological safety they are more willing to learn and share openly, facilitating greater collaboration.

Leaders can strongly influence the level of psychological safety through their own behaviour. Edmonson advocates three leader behaviour patterns that tend to increase psychological safety in a group. First, leaders should make themselves accessible to members of the group. In being available and approachable, leaders help reduce barriers to discussion and communication. Second, leaders should

invite input from the group. Leaders who solicit feedback and opinions from the group increase the likelihood that members will feel comfortable sharing ideas openly with the group. Third, leaders should model openness and fallibility. By demonstrating vulnerability the leader encourages open discussion of errors and mistakes. This reduces the fear of punishment and decreases defensive behaviours.

BUILDING SKILLSETS

Clearly, attitudes impact behaviour and vice versa, so the distinctions between the preceding subsection and this one are subtle and invoked merely to enhance comprehension. Whereas the preceding points of leverage targeted particular cognitive conditions beneficial to collaborative activity, this section, by contrast, selectively reviews points of leverage aimed directly at producing particular behaviours in collaborative situations.

Any kind of collaborative or group work can benefit from more mindful interaction and effective communication among participants. Thus, it is assumed that leaders already attend to building basic skills such as effective technology-supported communication, intercultural communication, understanding and avoidance of misattributions, and so forth. The following section offers themes and skills that are not necessarily accepted wisdom.

Build and sustain interpersonal trust:
Essential for collaborative work, trust can be difficult to build and easy to undermine. David Perkins points out that, in order to develop appropriate trust, it is important to appreciate its many nuances. When we trust someone, we can trust their capability to do something, or we might trust their commitment to complete a task, or we may trust the role they will play in a situation. In particular collaborative contexts, participants should be encouraged to clarify their expectations of others so as to avoid what Perkins calls the error of categorical trust. Categorical trust often contains unexamined assumptions that can lead to disappointment and distrust. For example, we may have unreasonable expectations of others, assuming they are competent in areas where they are not. We may have unexpected expectations, assuming others know exactly what we expect of them, when in fact they do not. By appreciating the complexity of trust, collaborating members can learn to trust reflectively based on articulated assumptions.

Even after trust has been broken, Perkins asserts that a good rule of thumb is to err on the side of trusting a little too much rather than too little, relying on the existence of shared goals to enable members to redevelop a sense of interconnectedness and cohesion. This approach can be particularly helpful during tense or conflictive situations, which are almost inevitable during collective activity.

Acknowledge and work with emotions:
Emotions are an important and often overlooked aspect of collaborative activity, yet their complexity and power often leads to the under-appreciation or dismissal of their role in work relationships. Instead of letting emotions generate confusing and conflicting behaviour in the collaborating group, it is possible for members to learn to use their emotions to increase communication and strengthen their relationships. Fisher and Shapiro's work explores five core concerns—appreciation, autonomy, affiliation, status and role—which tend to drive our emotional response. Their research suggests ways to better understand the emotional dynamics and develop skills to elicit positive emotions in a collective situation. For example, participants can learn to be more appreciative of other's perspectives and to express this appreciation

clearly, which can greatly reduce tension and increase positive emotions.

Autonomy or the lack thereof, when individuals feel their freedom is being limited or impinged upon, can be another source of negative emotions. Decision-making occasions in collective work are ripe for autonomy conflicts but collaborative groups can avoid such conflict by agreeing on a decision-making protocol beforehand. For example, perhaps one individual or group makes a decision and then informs others in the larger group. Alternatively, the group consults before making a decision, but leaves the final decision to one individual. Finally, they may choose to negotiate certain decisions as a group. Developing skills that clarify how decisions in various domains will be established also clarify the bounds of individuals' autonomy and reduce opportunities for conflict.

Affiliations, both structural and personal, between groups and among group members can strongly impact emotions because they can be used to highlight who is "close" and who is "distant". On the other hand, the minimal group phenomenon suggests that it should be relatively easy for leaders to point to something in common that people can use to affiliate with others quickly. Similarly, both social status and individual status, based on one's unique skills and experience, can engender positive and negative emotions in a group setting. Leaders can model behaviour highlighting the unique expertise and experience of each individual, which can counteract negative emotions elicited through a lack of social status or undeserved "status spillover" from someone's high social status in another area. Roles are also emotion-laden in that they provide an overarching framework for behaviour and attitudes. Since emotionally-fulfilling roles support and elicit more engagement and participation from individuals, wise leaders encourage and assist participants in shaping personally meaningful and significant roles for themselves in each collaborative endeavour.

Develop helpful roles:
Conflict is an inevitable part of collaborative work. Seeing conflict as an emergent dynamic of a group means each member of the group plays a role in either contributing to or containing any group tension. William Ury's work highlights the individual responsibility of collaborating participants to address conflict as it emerges, rather than wait until it escalates. He offers ten different roles individuals can play to manage tensions and reduce conflict at three progressive stages of conflict, likening this approach to the body's immune system, which is always on alert for potential problems and attempting to deal with them before they irrupt into a complete outbreak.

The first stage is prevention and includes the roles of Provider, Teacher, and Bridge-builder. These roles are designed to work at the level of latent tension to stop any conflict before it starts. The second stage is resolution and includes the roles of Mediator, Arbitrator, Equaliser, and Healer. These roles are designed to work at the level of resolution, helping to manage and reduce conflict after it has emerged. The third stage is containment and includes the role of Witness, Referee, and Peacekeeper. These roles are designed to help contain overt conflict after it has emerged, creating a safe space to deal with and prevent power struggles from spreading to other areas.

Joint endeavours involving different organisations and/or impacting large numbers of different stakeholders may be particularly susceptible to falling into competitive rather than collaborative modes of engagement. Leaders can promote the likelihood of successful collaborative outcomes by educating

participants about their own power to avoid degeneration into conflictive situations and possibly even assigning specific roles, along the lines suggested by Ury.

Concluding Thoughts

The fact that successful collaborations continue to elude us signals the complexity of this topic and the phenomenon. The preceding section highlighted ways to enable collaborative behaviour to flourish and to support that behaviour when obstacles arise. Yet, as LILA Director David Perkins warns, enablement on its own is insufficient, often providing a low yield of a targeted behaviour or attitude, so leaders need to be vigilant and proactive in developing the behaviour they seek.

Huxham and Vangen (2005) also note that when envisioning the design and support of collaborative enterprises, we should remember that the aims of collaborative activities change over time, as the lessons of successes and failures are digested and new information is processed. The trust relationships, balances of power among participating parties, and even the identities of those involved will shift (often imperceptibly) over time. It is thus important for leaders to stay alert to these changing dynamics and to focus energies on managing, rather than resisting or ignoring, their impact on collaborative processes.

Moreover, in spite of our best efforts to design around, and manage, the complexities inherent in collaborative undertakings, we should not underestimate the "messiness" inherent in collaborative work. Huxham and Vangen suggest the simple (but not always so obvious) step is to accept the fact that collaborative enterprises will not work "as planned." Acknowledging, up front, that groups will encounter unexpected complexities and frustrations on the road to collaborative success can reduce the psychological impact of inevitable setbacks. Anticipating and tolerating messiness can position people to expect and harvest valuable lessons from their mistakes—freeing them to take the risks necessary to insure collaborative success.

Finally, we can get a sense of what true collaboration should feel like by comparing it with Csikzsentmihalyi's characterisation of flow. When participants are fully engaged, acting mindfully, feeling challenged yet optimistic, and interacting synergistically, that is a signal that the collaboration is working as it should!

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