RESEARCH & IDEAS

Are Great Teams Less Productive?

Q&A with: Amy Edmondson
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Author: Sarah Jane Gilbert

*While studying teamwork, Harvard Business School professor **Amy Edmondson** chanced upon a seeming paradox: Well-led teams appeared to make more mistakes than average teams. Could this be true? As it turned out, good teams, which value communication, report more errors. In a recent research paper Edmondson and doctoral student **Sara Singer** explore this and other hidden barriers to organizational learning. Key concepts include:*

- *There are built-in tensions between learning and performance, which smart organizations must learn to recognize and deal with.*
- *The challenge for managers is to promote learning without sacrificing performance in the short term.*
- *In well-led teams, a climate of openness could make it easier to report and discuss errors compared to teams with poor relationships or with punitive leaders. The good teams, according to this interpretation, don't make more mistakes, they report more.*
- *Seen in this way, managers have two jobs. One is to become team leaders who encourage open discussion, trial and error, and the pursuit of new possibilities in the small groups they directly influence. The other is to work hard to build organizations conducive to extraordinary teamwork and learning behaviors throughout the organization.*

Learning promotes performance—is there any argument? Without learning, organizations, teams, and managers are stuck in yesterday's world.

In fact, says Harvard Business School professor Amy Edmondson, there are built-in tensions between learning and performance, which smart organizations must learn to recognize and deal with. For example, an organization that has just completed a learning initiative may see a drop in productivity, at least in the short term.

Edmondson and doctoral student Sara Singer explore the problematic relationship between learning and performance in a recent

working paper, "When Learning and Performance are at Odds: Confronting the Tension." In this interview, Edmondson discusses her work and practical considerations for organizations looking to sharpen their learning skills, i.e., any business hoping to be successful in today's quickly changing world.

Sarah Jane Gilbert: What led you to pursue this research?

Amy Edmondson: This research, rather than being a single project, is part of a fifteen-year program of a half dozen or so projects in different settings, all focused on learning in and by organizations. The paper, written with Sara Singer, on the tension between learning and performance, was an attempt to pull together a subset of insights from this longer journey about the challenges for managers who wish to promote learning without sacrificing performance in the short term.

The longer journey that I refer to was motivated by a desire to help organizations better access, integrate, and leverage the talents and insights of their employees. An earlier career as an organizational change consultant led me to realize how many thoughtful, caring individuals were stymied in their genuine desires to make a difference at work—that is, their desires to help make their organizations more effective and responsive. I met many individuals with great ideas and insights working in large organizations that seemed to be enacting policies or producing products that didn't reflect this insight. As a result, I became fascinated by the notion of the learning organization: organizations with the capacity to sense and act upon opportunities for positive change. Around this time, I thought I'd better go to graduate school to learn and explore these ideas more carefully.

Early on, I stumbled into one of the perverse aspects of the relationship between learning and performance. My first research project in graduate school explored the relationship between teamwork and errors (in hospitals), because errors are a critical input to organizational learning, especially in that setting. I assumed I'd find a negative

relationship between teamwork and error rate.

Instead, I stumbled into quite a different discovery. The statistical results I obtained were the opposite of what I'd predicted. Well-led teams with good relationships were apparently making *more* mistakes; there was a significant correlation between teamwork and error rates—in what I initially considered "the wrong direction."

This presented a puzzle. Did better-led teams really make more mistakes? I simply did not think that could be accurate. Why else might better teams have higher error rates?

One possibility was that they were more experienced and thus given tougher patients. To test this, I controlled for the severity of patient illness. The unexpected result not only did not change, the relationship got slightly stronger. Then, I suddenly glimpsed what these results might mean. In well-led teams, a climate of openness could make it easier to report and discuss errors—compared to teams with poor relationships or with punitive leaders. The good teams, according to this interpretation, don't *make* more mistakes, they *report* more. When I suggested this to physicians involved in the study, they were skeptical. Their response was understandable: With a research grant for the purpose of identifying the error rate, this idea was decidedly unwelcome. My interpretation of the data suggested that we might *not* be finding the definitive error rate—and further errors might be systematically underreported in certain units but not others. Their skepticism forced me to work hard to develop ways to support my proposition, which ultimately they came to see as reasonable, if not obvious in retrospect.

Since that time, my research has continued to investigate how group dynamics affect an organization's ability to learn—to improve organizational actions through better knowledge and understanding. To better understand this, I've conducted research in settings ranging from the front lines of healthcare delivery to the management boardroom. Through these studies, I have developed a particular perspective on learning in organizations—one that emphasizes the debilitating effects of interpersonal fear on collective learning processes.

Q: How do you define learning? How does learning promote performance?

A: I define learning as a process: A process of action, reflection, and new (often modified) action. Learning can be temporary—closing a gap—or ongoing. Learning promotes performance in two fundamental ways.

First, learning helps people develop skills and acquire knowledge. That is, learning is how people get where they need to be so as to perform in ways that they could not previously perform (even though others *could*). To illustrate, when my son learned to ride a bike, he was not the first person to ever ride a bike. His learning got him from being a non-bike rider into the population of bike riders. In this case, performance is improved by acquiring necessary skills or knowledge to do what others already know how to do. It is about relative performance, or closing a performance gap.

Second, learning occurs in reaction to changes in the world that require brand new responses. So, the second way learning promotes performance is by discovering and inventing new ways to respond that improve performance in some endeavor. Here, there may be no role models. No other bike riders to observe and follow. In this case, learning is paving new ground, typically in a trial and error manner. In this process, performance is improved by developing a better fit between the entity's capabilities and its environment's demands. An entity might be an individual, or a work group, or an entire organization.

Q: Is there a natural relationship between learning and performance? How and when does it become problematic and create tension?

A: There is a natural relationship between learning and performance in a changing world. That is, performance cannot be sustained over time without learning, because yesterday's performance is inadequate in today's world. So, to maintain or improve performance, learning is required.

The problematic nature of this relationship is two-fold. First, learning is messy. When you're learning, you're often without an instruction manual to follow for guaranteed results. Also, performance gains won't show up instantaneously. In a learning mode, it's awkward. It's a transition, or we hope it is

anyway, because there is no guarantee we are doing the right kind of learning. But, even if we are learning the right things, there is a transition to get through. The two-finger typist who wants to learn to touch type will suffer a performance decrement when he makes the shift. The idea was to improve performance by learning a new skill (e.g., touch typing), but in the short term, performance will be worse.

Second, learning processes by their nature involve facing failures—problems, mistakes—head on. The presence of problems or mistakes doesn't signal high performance to most people who might be watching. Some scholars go so far as to define learning as the detection and correction of error (notably Chris Argyris, now emeritus at HBS). So, clearly, if learning is about identifying error, in the short term, performance will appear to be weak (error ridden) while learning is occurring. At the very least, if learning involves trial and error, the error part does not resemble most people's idea of good performance. So, they're at odds.

Q: Is there a trade-off between the costs of learning vs. the benefits of improved performance?

A: For the most part, I think it's a false tradeoff. Not learning is an option, of course, but it's not a very good option in an ever-changing world. My point is that when managers don't explicitly recognize this reality, then the (here and now) appearance of high performance will seem far more valuable and preferable than learning, with its messy, error-ridden nature, and the former may be embraced while the latter is postponed.

Q: How do organizations learn? What can managers do to promote a healthy learning environment in their organizations?

A: I suggest that organizations learn through the learning of groups within the organizations. So, an organization's ability to learn—again, to improve its performance through better knowledge and action—is shaped by the interactions of individuals, typically situated within small groups or teams. When these groups make appropriate changes in how they do their work—driven by both group and organizational goals—an organization maintains or enhances its effectiveness in a changing world. Organizational learning can be seen as a process of cascading team learning

activities—independently carried out but interdependent in their impact on company performance.

Different types of teams or groups face different learning needs and challenges. A leadership team may face the need to make strategic decisions in a shifting landscape of possibilities, while a product development team struggles to understand customers' changing needs and to invent new ways to serve them, and a production team seeks to improve its work process.

Seen in this way, managers have two jobs. One is to become great team leaders who encourage open discussion, trial and error, and the pursuit of new possibilities in the small groups they directly influence. The other is to work hard to build organizations conducive to extraordinary teamwork and learning behaviors throughout the organization.

Q: What are you working on next?

A: I'm working on a couple of related projects. One, with colleagues Anita Tucker and Ingrid Nembhard, is trying to better understand how the learning activities of improvement project teams—teams created for the express purpose of improving some aspect of how the organization works—translate into organizational learning and improved performance. We've been collecting and analyzing data from a particular setting in which these questions are quite relevant—the neonatal intensive care unit, or NICU—across about two dozen hospitals. This work is pretty far along.

A second project, in collaboration with David Garvin at HBS and Francesca Gino at Carnegie Mellon, is the development of an instrument to assess learning organizations. We've been developing and testing a survey to help organizations better reflect on how they are doing in terms of organizational learning. We're finding that the use of this tool can stimulate high quality reflection among managers, of the sort that can stimulate future organizational learning and help managers manage the ongoing tension between learning and performance. **WK**

About the author

Sarah Jane Gilbert is a project manager at Harvard Business School.