



19 March 2001

Sustaining Innovation and Continuous Improvement

Learning About Learning :

Some Lessons From The Trenches

- Implications for eLearning initiatives?**

IRL's Mission Before and w/ WestEd:

- **To understand and leverage the social nature of learning**
- **To create better environments, tools and practices for learning in school and learning at work**
- **To bring research and design results into immediate use**
- **To help improve the quality of schools, work and business life**



Approach

- **Understand learning and work as it happens**
- **Design for learning that lasts**
- **Implement learning strategies**
- **Building practice/competency**



How?

- **In real-world settings**
- **With all stakeholders**
- **With staff from multiple disciplines**
- **Integrating research, design and implementation**
- **Leveraging insights across projects and settings**
- **Leveraging technology**
- **Rapid prototyping**



The constant questions

- **What does effective learning look like?**
- **How can we best support it?**
- **What strategies, tools and new practices are needed?**



The fundamental challenge

**“To do things differently, we need to see
Things differently.”**

**-Paul Allaire
Chairman, Xerox
IRL Board of Trustees Emeritus**



The fundamental understanding: learning is social

- We most often learn with and through others.
- What we choose to learn depends on
 - Who we are
 - Who we want to become
 - What we care about
 - Which communities we wish to join or remain part of.



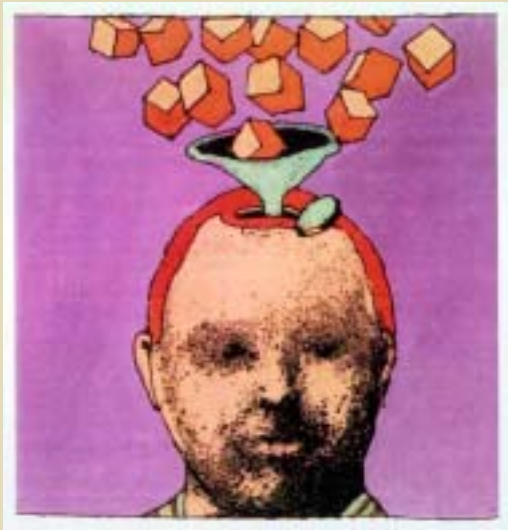
Learning is social

- **Knowledge in use is highly dependent upon context and situation.**
- **Everyday, informal learning is constant and everywhere, but not well understood.**

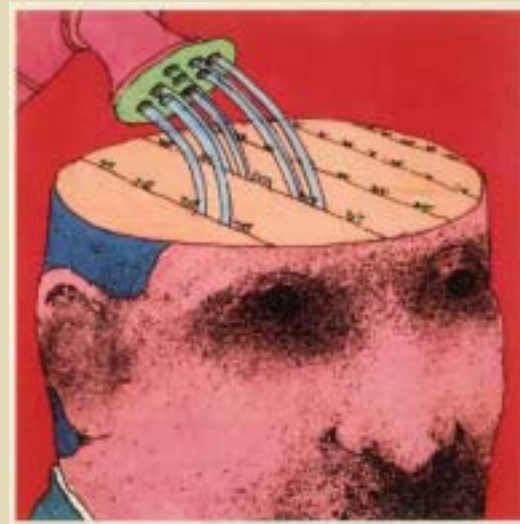


The prevailing models would argue

That we often think of learning like this...



**The delivery model:
“I teach - you learn”**



**“Cultivate based on
existing knowledge”**

But, it is more like this...



**The interactive model of learning:
“I learn in and through my interactions
with others and the world”**

And more like this...



**Informal communities learn
and construct knowledge together.**

And also like this ...



**Classrooms often work best when kids
are engaged - together -in real work.**

So, we need to remember what we already know . . .

- How can we use what we already know to transform how we design for learning?



Leveraging the social dimension of learning

- **Apprenticeship**
- **“Communities of Practice”**
- **Principles of Learning**
- **Implications**



Apprenticeship is very natural



Apprenticeship is a widespread, social process

- **Implies a process for membership**
- **Requires participation**
- **Involves sanctioned observation**
- **Finding your place requires finding your way (and vice versa)**



What apprenticeship tells us about how people learn

- **Newcomers learn as they become members of a community.**
- **Established practitioners, even masters, continue to learn through teaching, and also through their participation in practice.**
- **Learning is a condition of continuing membership in communities.**



“Communities of Practice”



Key IRL concept: “Communities of Practice”

- **A group of people (a community)**
- **Who develop a shared way of working or playing together to accomplish some activity (their practice)**
- **Usually involves individuals with different roles and experience**
- **Usually informal; not a new form of formal organization**



“Communities of Practice” how they come to be

- **They emerge as we pursue shared enterprises over time.**
- **Joint activities creates shared practices.**
- **These shared practices create bonds.**
- **This process goes on:**
 - **Participation changes**
 - **People are transformed**
 - **“Communities of Practice” form and dissolve.**



Learning Links to Identity

- **People learn as they participate in a “Community of Practice.”**
- **Learning and identity are linked: what we learn has much to do with who we are or who we wish to become.**



How do people know what they know?

- **Knowing is embedded in practice.**
- **Much of what we know is tacit.**
- **Knowledge can be distributed in and among “Communities of Practice.”**
- **Much of what people know is locally dependent.**



How do organizations know what they know?

- **Organizational “knowing” is often embedded in webs of “Communities of Practice.”**
- **Capturing knowledge and best practices can only get at part of what organizations really know.**
- **“Knowledge transfer” requires genuine participation to actually take hold.**



Seven Principles of Learning

- **A set of principles based on IRL's work (and the work of others)**
- **Inform practical change in learning strategies, teaching practices, assessment and innovation**
- **Lay the groundwork for a new learning agenda for schools, higher education, workplaces, families and the transition from school-to-work**
- **To guide most effective role and applications of eLearning**



1. Learning is fundamentally social



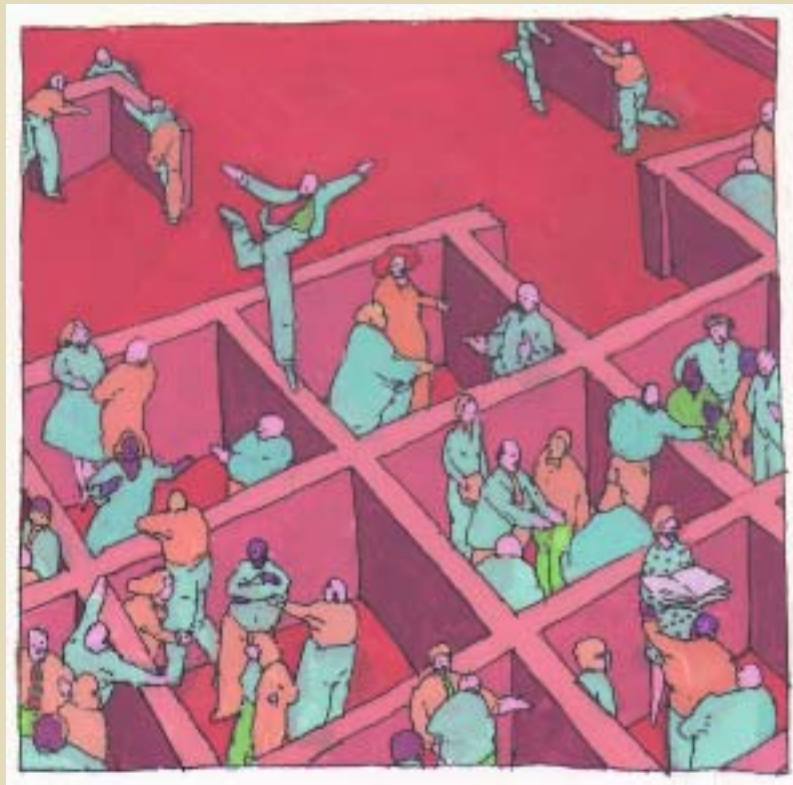
**A matter of changing “identity”
Not just acquiring “knowledge”**

2. Learning is integrated into the life of communities



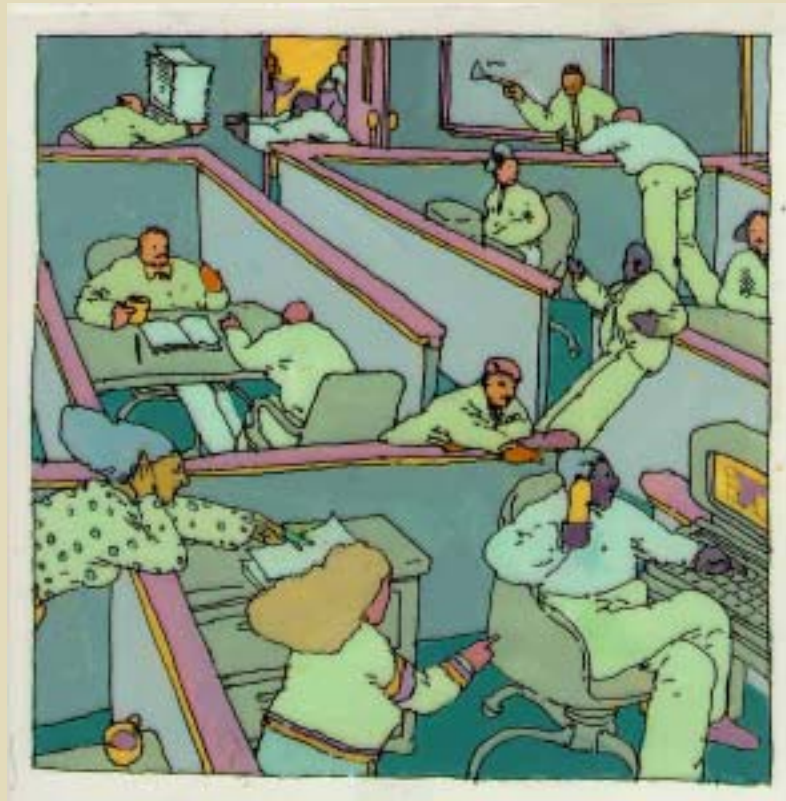
**Sharing values, perspectives,
and ways of doing things,
creates a “Community of Practice”**

3. Learning is an act of participation



The motivation to learn is the desire to participate in a “Community of Practice”

4. Knowing depends on engagement in practice



**People glean knowledge from observations
of, and participation in,
a variety of situations and activities.**

5. Engagement is inseparable from empowerment



Individuals perceive their identities in terms of their ability to contribute, and affect the life of a community.

6. Failure to learn is the result of exclusion from participation



**Learning requires access
and opportunity to contribute.**

7. People are natural lifelong learners



**People learn what enables them to participate
in the “Communities of Practice” they want to join.**

Seven Principles of Learning

- 1. Learning is fundamentally social.**
- 2. Learning is integrated into the life of communities.**
- 3. Learning is an act of participation.**
- 4. Knowing depends on engagement in practice.**
- 5. Engagement is inseparable from empowerment.**
- 6. Failure to learn is the result of exclusion from participation.**
- 7. People are natural lifelong learners.**



So ...

- **What we choose to learn is often about who we are or who we wish to become.**
- **Learning most effectively takes place in the informal, social world of “Communities of Practice”.**



Some general implications:

- **“Stand, deliver (...and pray!) as a teaching or training style is fraught with even more limitations than we already knew.**
- **Top down, cascading of information often has limited power by itself.**
- **Learning often unfolds in surprising ways, especially when people are learning in rich, engaging environments.**



Implications for organizations:

- **Know your landscape of communities**
 - **Where are they? Who is included?**
 - **Who are the brokers between communities?**
 - **Are these communities connected?**
- **Move beyond communication to genuine, engaged participation**



More Implications for organizations:

- **Work together to build organizations as “learning organizations” where innovative practices are harvested, shared, and adapted.**
- **Consider the real work of practitioners when designing learning programs and practices.**
- **Reduce unintended barriers—in rules, practices, even in the layout of physical facilities.**



Implications for eLearning :

- Shift perspective from primarily a tool for fast, cheap “delivery” of information and support for networks to one that sees technology as a key support for informal communities as they learn from one another.
- Think community-building: support naturally occurring communities and provide opportunities through face-to-face and electronic networking.
- Remember: Technology is not a panacea. It cannot be a substitute for face to face interaction and a credible overall learning strategy.
- Participation is at the heart of learning.



Implications for training settings:

- **Build and sustain informal and formal learning communities.**
- **Constantly integrate learning with the real practices of the real work.**
- **Invest in and promote learner engagement.**
- **Increase the connection between what people learn and who they are or wish to become.**
- **Work toward “Pull” vs. “Push.”**



Implications for integrating learning and work:

- **Develop new practices with an understanding of the old**
- **Support and nurture natural learning communities**
- **Design the work environment to support productivity and continuous learning**
- **Sustain and leverage informal learning through the strategic application of formal supports**



Embedding Change into Work Practice: Key Challenges

- **How best to embed the culture of enterprises with a perspective and a new set of practices that support systemic reform on a continuous basis?**
- **How best to foster continuous learning and innovation throughout the “circulatory system” of the organization?**



What can we learn from private sector experience?

- **Companies have a terrible record at implementing change.**
- **Reason: poor execution**
- **Organizations that do well in leading change quickly and well use “routines”–they build practices that they can use over and over again.**
- **Practices that involve the marriage of:**
 - **Work processes**
 - **Organizational structure**
 - **Culture**
 - **Capabilities**
 - **Information Environment**
 - **Physical workplace**



Other lessons from private sector?

- **IRL's experience suggests that successful companies in change efforts have developed new habits of mind and practices around learning, building on the social perspective.**
- **The focus also shifts to learning for everyone, everywhere, all the time, embedded in the very fabric of the work they do, everyday.**



Building a change—oriented culture?

Some questions...

- How do you develop and nurture new communities of practice around a continuous improvement/innovation model?
- What are the roles for leaders?
- How do bring “the rest” along?
- How do you sustain this model amidst the continuous chaos and change that enterprises face?



Nurturing new Communities of Practice around the changes

- **Recognize and encourage early adopters**
- **Support co-development with stakeholders; create ownership as you leverage expertise and different perspectives**
- **Recognize that no change worth making is easy or swift**
- **Recognize that the change process is not linear**
- **Maintain the larger horizon objectives**
- **Publicly recognize the small victories along the way**



For change to last...

- **Go first where the interest and motivation already exists**
- **Focus on early adopters; connect them to one another**
- **Provide “migration paths” when change requires shifts in identity**
- **Protect those habits in the “cultural DNA” which should remain and be honored.**
- **Remember: change takes time.**



Role of leaders

- **Make sure change agents are visible and supported**
- **Support risk takers**
- **Celebrate successes - even small ones**
- **Provide “air cover” so that fear of failure is minimized**
- **Don’t punish failure; learn and move on**
- **“Fail early so you can succeed sooner”** (IDEO CEO David Kelley)



Role of the leaders

- **Support the informal “communities of practice” that are driving change**
- **Support mentors and local experts**
- **Support the brokers and folks at the periphery—the boundary people—that straddle communities, have extensive networks and hold respect across different constituencies**
- **Create the enabling conditions for learning - both formal and informal - among all stakeholders**



Role of the leaders

- **Top down “cascading” of information rarely connects**
- **Communicate, communicate and...just when you are exhausted ... then communicate again!**
- **Support lateral and informal communications**
- **Even effective communication isn't enough; engagement is essential**
- **Stakeholders need to make sense of the changes themselves in their own ways**



Bringing the rest along

- **A participatory style is essential; recognize both the informal as well as the formal organization**
- **Genuinely involve stakeholders; engage them, seek their counsel, don't just ask their opinion**
- **Even those who oppose the changes have great knowledge of the system and care for what they have invested in**



How best to sustain the inroads made amidst the chaos?

- **Implementation usually fails if it is seen solely as a “roll out” process from the top down.**
- **Implementation is best seen as the development of new practices and the movement of large amounts of new information around the organization.**
- **Recognize that knowledge and know - how spreads laterally and informally through “Communities of Practice”.**



Sustaining the inroads made requires...

- **Continuously seeking to learn from the change effort experience itself. What did not work? Why? What would we do differently knowing what we know now?**
- **Craft a learning strategy up-front so that continuous learning - embedded in the work itself - comes naturally to everyone in the organization.**



In sum...

- **Change happens through engaged participation**
- **“Communities of Practice” are the centers for the spread of learning and innovation**
- **Celebrate small changes**
- **Avoid creating an elite**
- **Communicate continuously**
- **Listen...and respond authentically**



Discussion Questions



- **Do these lessons from the trenches make sense to you from your own personal experience?**
- **Which seem particularly critical to apply?**
- **Which seem to be least understood or least applied in practice?**



•What barriers do you face in implementing learning strategies that reflect these findings and principles?



- **What can you do to ensure that the learning experiences you help make happen are directly integrated with the work practices that exist on the job?**

