

<b>Overview</b>	
Organizational learning is the process of creating, retaining, and transferring knowledge within an organization. An organization improves over time as it gains experience.	
<b>Example Application to Implementation Science</b>	
Berta, W., Cranley, L., Dearing, J. W., Dogherty, E. J., Squires, J. E., & Estabrooks, C. A. (2015). Why (we think) facilitation works: insights from organizational learning theory. <i>Implementation Science</i> , 10(1), 1-13.	
Tucker, A. L., Nembhard, I. M., & Edmondson, A. C. (2007). Implementing new practices: An empirical study of organizational learning in hospital intensive care units. <i>Management science</i> , 53(6), 894-907.	
<b>Construct</b>	<b>Definition</b>
Explicit knowledge	Facts and information that can be codified (e.g., in policies and procedures)
Tacit knowledge	Facts, information, and skills that are difficult to codify
Learning process	An interaction of experience (history) and context that produces knowledge
Learning subprocesses	A series of actions associated with the learning process, including: <ol style="list-style-type: none"> <li>1. Knowledge creation: knowledge acquired from direct experience of unit (e.g., trial and error experimentation)</li> <li>2. Knowledge transfer: knowledge transmitted through socialization, education, imitation, professionalization, personnel movement, mergers, acquisitions (Levitt &amp; March)</li> <li>3. Knowledge retention: knowledge that is embedded in active context (e.g., written policies; job roles)</li> <li>4. Knowledge search: seeking solutions (in the form of information) for organizational problems</li> </ol>
Dominance of organization in field of competitors	The extent to which an organization is perceived to be powerful in relation to its competitors
Complexity of an organization's environment	The extent to which the context in which an organization operates is or is not (1) stable over time and (2) predictable (e.g., customer preferences; availability of resources)
<b>Propositions</b>	
<ol style="list-style-type: none"> <li>1. Organizational learning is a process that occurs over time, in cycles, with varying frequency and timing (before, during, or after task performance) across multiple systems levels (individual, group, organization, and inter-organizational), and within a context that includes the organization and the environment in which the organization is embedded (Argote and Miron-Spector, 2011).</li> <li>2. Organizational learning occurs through changes in cognitions or behavior.</li> <li>3. Organizational learning includes both explicit and tacit components.</li> <li>4. Organizational learning may be active (i.e., strategic) or passive (e.g., by accident).</li> <li>5. Organizational learning requires both change (to introduce new information) and stability (to facilitate interpreting information).</li> <li>6. Organizations that are resistant to the change required for learning are vulnerable to paradigm peddling (e.g., promises of positive learning outcomes) and paradigm politics (e.g., posturing for acceptance of one mode of achieving positive learning outcomes) (Levitt and March, 1988).</li> <li>7. Organizational learning can occur naturally, or it can be simulated.</li> <li>8. Organizational learning can occur at higher- or lower-order levels. Double loop learning occurs when the organization's underlying norms, policies and objectives are changed (higher-level). Single loop</li> </ol>	

learning occurs when the organization's fixes a problem but does not address the underlying norms, policies and objectives that contributed to the problem.

9. Knowledge derived from organizational learning may be embedded in active context (e.g., routines, tools, tasks) and in latent context (i.e., invisible but nonetheless present; e.g., organizational culture).
10. Knowledge derived from organizational learning can be characterized by level of causal ambiguity (i.e., extent to which cause-effect relationship is understood).
11. Organizational learning can occur through multiple subprocesses (attentive, controlled versus routine, automatic).
12. Organizational learning subprocesses vary in their distribution across organizational members (i.e., whether learning spreads from bottom [i.e., frontline employees]-up [i.e., to top managers] versus top-down).
13. Some organizations are powerful enough to create their own environments; weaker organizations will learn to adapt to the dominant ones (i.e., they will learn to learn) (Levitt and March, 1988).
14. Powerful organizations, by virtue of their ability to ignore competition, will be less inclined to learn from experience and less competent at doing so (Levitt and March, 1988).
15. Overly complex organizational environments inhibit learning because:
  - a. Environmental complexity makes establishing causality and interpreting outcomes from learning difficult.
  - b. Complexity increases uncertainty, challenging perceptions and interpretations of the environment necessary for learning.
16. Stable and predictable environments favor maintaining existing routines and limit learning.
17. Overly unpredictable environments stimulate much action/change but little learning.
18. Unstable environments require renewal and innovation that meaningful learning can produce.
19. Moderately unstable environments may be the most conducive to change and subsequent learning.

### Potential Relevance to Implementation Science

1. Organizations may **adopt** EBPs that highly successful organizations are using and bypass the need for direct experience; this can lead to incomplete or flawed learning.
2. **Implementation strategies** should facilitate organizational learning (e.g., through iterative, small tests of change like Plan-Do-Study-Act cycles).
3. **Implementation strategies** may also promote knowledge transfer across organizations (e.g., peer networking, learning collaboratives).
4. **Planning for implementation** should include assessing the competitive environment and identify which organizations are more and less dominant.
5. **Planning for implementation** should involve assessing the level uncertainty in the organizational environment. High levels of either uncertainty or stability may inhibit learning.
6. **Implementation outcomes** may manifest in explicit (e.g., policies) and tacit (e.g., climate) knowledge, so both types should be assessed.
7. **Implementation** may be influenced by explicit (e.g., policies) and tacit (e.g., climate) knowledge. For example, tacit knowledge of past failures (and thus reluctance to engage in change required to learn) may inhibit implementation. Assessing these factors and accounting for them may facilitate implementation.

### Criticisms and/or Bounds on the Theory

Caldwell, R. (2012). Systems thinking, organizational change and agency: A practice theory critique of Senge's learning organization. *Journal of change management*, 12(2), 145-164.

Easterby-Smith, M., Araujo, L., & Burgoyne, J. (1999). *Organizational learning and the learning organization: Developments in theory and practice*: Sage.



### References

Argote, L., & Minor-Spektor, E. (2011). Organizational Learning: From Experience to Knowledge. *Organization Science*, 22(5), 1123-1137. <http://dx.doi.org/10.1287/orsc.1100.0621>

Levitt, B., & March, J.G. (1988). Organizational Learning. *Annual Review of Sociology*, 14(319), 40.

### Type: Theory (grand, mid-range), perspective, model, etc.

- Grand theory