

# RECONCEPTUALIZING LEARNING

A Brief on Informal Learning

From original research by

# MICHELLE VAN NOY

School of Management and Labor Relations Rutgers, The State University of New Jersey



livi



ACT Center for Equity in Learning

Learning is foundational to economic and life success in today's society. With a rapidly changing job market and the growth of the knowledge economy, learning is increasingly important, as workers are compelled to continually build and rebuild their knowledge and skills [1]. The imperative for learning is further compelled as workers move across numerous jobs and multiple careers in a lifetime, continually building skills while also working. Traditional notions of learning where students continuously attend school and complete a degree equipped with the skills needed throughout their career are no longer relevant. This shift calls for a fundamental rethinking of how learning occurs.

Typically when we think about opportunities for learning, we conjure an image of formal learning—in classrooms, taught by instructors, leading to a degree. In actuality, learning occurs everywhere, all of the time, and a vast amount of learning occurs outside the formal schooling context. Recognizing this reality, common notions of learning can be re-conceptualized to include the broad range of learning experiences that occur informally. As the emphasis on lifelong learning grows, understanding these informal learning experiences is increasingly important in order to harness their benefits to support the needs of learners and promote economic vitality. But, what exactly is informal learning? How does it impact learners and the workplace? And, what are the implications for the future of learning?



# UNDERSTANDING INFORMAL LEARNING

Informal learning is often defined in contrast to formal, and there are, in fact, many ideas of how to define formal and informal learning<sup>[2]</sup>. Given the often blurry boundary between formal and informal learning, it is helpful to consider learning as occurring along a continuum of formality. This continuum can be defined by several dimensions:

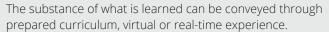
#### **LOCATION 9**

Where the learning takes place. This can be school, work, community, or home. Within a work setting, learning can happen off or on the job.

## PROCESS \*\*

How learning takes place. This can include instructor-led learning, learner-led approaches, and learning that occurs within the context of an activity or experience.

#### CONTENT **III**



# PURPOSE &



This continuum of learning formality—see Table 1—illustrates the wide range of learning that occurs. No one single type of learning is best—each has its time and purpose.



# **TABLE 1.** CONTINUUM OF LEARNING FORMALITY, ADAPTED FROM COLLEY, HODKINSON, AND MALCOLM (2003)

	Formal Learning	Organized Informal Learning	Everyday Informal Learning		
			Self-directed Learning	Incidental Learning	Tacit Learning
• Location	School Awarding Formal Credential	School Not Awarding Formal Credential, Work, or Community	Work, Community, Home	Work, Community, Home	Work, Community, Home
• Process	Instructor Led	Instructor Led	Learner Led	Contextual	Contextual
■ Content	Organized Curriculum	Organized Curriculum	Learner Organized	Spontaneous Based on Need	Social Norms and Practices
₫ Purpose	Intentionally Sought	Intentionally Sought	Intentionally Sought	Not Intentionally Sought but Aware After	Not Intentionally Sought, Not Aware After

The continuum of learning formality extends conceptions of learning to include informal learning experiences. Based on the continuum, three broad categories of learning emerge, each encompassing a multitude of examples of learning:

#### **FORMAL LEARNING**

Intentionally sought by learners, includes a formalized curriculum, with an instructor, and occurs in traditional, classroom-based, accredited educational institutions that issue credentials; examples include postsecondary education programs that lead to degrees.

#### ORGANIZED INFORMAL LEARNING

Intentionally sought by learners, involves some type of curriculum and instructor, but does not lead to an educational credential; examples include noncredit learning, formal workplace training, communities of practice, some types of work-based learning, volunteerism and service learning, and some forms of mentoring/coaching.

#### **EVERYDAY INFORMAL LEARNING**

Unstructured and occurs in daily life across all settings with no curriculum, where the learner may or may not be aware of the learning; examples include some forms of mentoring/coaching, learning via trial and error, modeling others, reading books, and web searching.



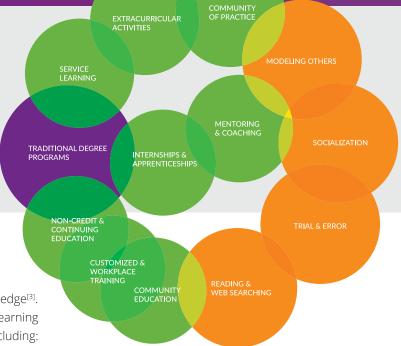


#### FIGURE 1: AN EXPANDED CONCEPTION OF LEARNING

**Figure 1** illustrates examples of informal learning activities in this broadened conception of learning. This conception includes a vast array of learning opportunities that commonly occur but would not be included in a traditional conception of learning.

- FORMAL LEARNING
- ORGANIZED INFORMAL LEARNING
- EVERYDAY INFORMAL LEARNING

Several ways of learning are common across the continuum of learning formality. People bring knowledge and understanding to all learning situations and learn through active engagement and integration of new learning with their prior knowledge<sup>[3]</sup>. While these ways of learning are shared across the continuum of learning formality, they are particularly associated with informal learning including:



Active learning or strategies that incorporate reflection, guided engagement, problem solving, constructive learning, or interaction<sup>[4]</sup>.

Situated learning or learning through social practice via the interaction of a person with the environment<sup>[5]</sup>.

**Experiential learning** or learning by grappling with real-world problems to construct and test solutions, and reflecting to make sense of the experience<sup>[6]</sup>.

**Relational learning** or learning from others in a social context; acquiring knowledge from various social environments through observation of others<sup>[7]</sup>.

Technology has dramatically altered the possibilities for learning that are available—both increasing and diversifying opportunities for learning. Mobile technology allows access to information that transcends time and place, creating ubiquitous opportunities for informal learning<sup>[8]</sup>. Google allows anyone with an internet connection to pursue their curiosity whenever and wherever they choose. While this kind of unstructured learning is very difficult to quantify or assess and information quality control can be difficult to maintain, it is a significant change in the opportunities available for learning. Online games and simulations offer new learning opportunities that may be particularly powerful because they provide opportunities for experiential learning and learners are highly motivated to engage in them<sup>[9]</sup>. Virtual reality simulations can help students and entry-level workers gain specific skills needed at work or to test out work experiences before committing to a career path<sup>[10]</sup>.



# BENEFITS OF INFORMAL LEARNING

Informal learning provides a range of benefits—both to learners and to organizations. These benefits arise from the unique dimensions of learning that define informal learning—its greater flexibility with curriculum and instructors, as well as its strong connection to context and learner needs.

#### **FOR LEARNERS**

Informal learning most fundamentally can help learners develop skills. Informal learning in the workplace, for example, can help learners develop stronger skills in problem solving, communication, and leadership, as well as lead to increased confidence<sup>[11]</sup>. Through this skill development, learners ultimately have the potential to obtain better jobs and advance in their careers<sup>[12]</sup>. For learners who are exploring careers, informal learning in the workplace through work-based learning experiences can provide an opportunity to explore and inform their decision-making<sup>[13]</sup>. Work-based learning opportunities can help learners develop an understanding of the rules and norms of work, professionalism, and the culture of the workplace—lessons that are difficult to convey in the classroom<sup>[14]</sup>.

#### FOR THE WORKPLACE

A significant benefit of informal learning is its immediate relevance to the workplace. Information is obtained as it is needed, reflecting how people learn<sup>[15]</sup>. It is flexible and can be customized to the learner and their workplace needs as they emerge from the context of the work environment<sup>[16]</sup>. This is the case for a wide range of informal learning opportunities including apprenticeships and co-ops, noncredit training, mentoring and coaching, as well as everyday workplace learning. Particularly in the case of everyday informal learning, knowledge can be rapidly translated into practice as it is shared among workers and managers<sup>[17]</sup>. Informal learning can also improve the overall workplace environment by improving relationships between workers and managers, increasing worker engagement and satisfaction, and, ultimately, improving organizational effectiveness and use of human potential<sup>[18]</sup>.

# **CONCERNS ABOUT INFORMAL LEARNING**

At the same time, not all learners can equally access and benefit from informal learning opportunities. Additionally, concerns exist about the quality of what is learned informally and how this learning can be recognized.

### **EQUITY**

While informal learning offers benefits, more advantaged learners—those with strong foundational skills—are most likely to experience informal learning. Learning begets learning—both formal and informal. Learners who may have grown up in disadvantaged school environments and/or experienced unsuccessful learning may not feel empowered to seek out informal learning opportunities<sup>[19]</sup>. However, the relevance and urgency of lifelong learning, such as when linked to career advancement, can outweigh these prior experiences<sup>[20]</sup>. With supports to improve foundational skills, informal learning opportunities can more equally benefit learners.

Similarly, while technology has the potential to increase informal learning opportunities, it is not equally accessible. Basic Internet access as well as broadband speed and access are often determined by socioeconomic status, although smartphones have helped make the Internet more accessible<sup>[21]</sup>. At the same time, technological literacy varies widely—and the "new digital divide" is not between those who have computers and those who do not, but between people who know how to use computers to their advantage and those who do not<sup>[22]</sup>.

At an organizational level, informal learning opportunities in the workplace are not equally distributed. Workplaces tend to offer organized informal learning opportunities to educated, more highly paid, younger, and permanent staff over lower-ranked staff<sup>[23]</sup>. Further, workplaces vary in how they promote opportunities for everyday informal learning<sup>[24]</sup>. Organizational culture and job structures can affect opportunities for learning both in terms of providing access to learning and promoting quality in learning<sup>[25]</sup>.



#### QUALITY AND RECOGNITION

A significant concern about informal learning is with its quality. Such learning can be too narrowly based so that employees only learn how to do part of a task or acquire superficial skills that may not be transferable to other situations, a particular concern when the learning is unconscious and unrecognized by the learner<sup>[26]</sup>. Another related and serious concern is that employees may learn bad habits or the wrong lessons<sup>[27]</sup>. In addition, informal learning can be a circuitous and possibly inefficient process<sup>[28]</sup>. Because workers might not realize that they need new knowledge to solve a problem, they may choose inefficient methods.

Related to the quality of informal learning experiences, a major concern exists about how informal learning is recognized and rewarded. Several strategies have been developed to recognize and translate informal learning into value for the learner. Some allow for translation into credentials—either educational credentials conferred through the formal education system via prior learning assessments, or alternative types of credentialing, such as industry certifications, professional licensure, and emerging forms such as badges. Other approaches bring direct benefits to workers on the job, such as career ladders that reward ongoing learning and performance. Sometimes strategies bring together educational credentials and rewards at work through learn and earn models. By acknowledging informal learning, both learners and their workplaces can benefit.

# IMPLICATIONS FOR THE FUTURE OF LEARNING

Re-conceptualizing learning to include the full continuum of learning with its multitude of informal learning experiences reveals new possibilities in promoting learning. By recognizing learning in all the forms that it occurs, it is possible to expand learning opportunities to benefit both learners and employers. When envisioning the future of learning, this broadened conception of learning raises attention to the need to promote a variety of informal learning experiences, to support learners in their pursuit of informal learning, and to document informal learning in ways that are meaningful to learners and employers. Informal learning may have the potential to promote equity by increasing access to learning opportunities if care is given to promote broader skill development, workplace structures that support learning, and efforts to ensure digital equity. Additionally, new ways to demonstrate learning through alternative forms of credentialing can ensure valuable skills and abilities are rewarded in the labor market

Changes in the economy and the increased need for lifelong learning, coupled with innovations in technology expanding possibilities for learning, elevate the importance of informal learning. With this broadened recognition of the possibilities for learning come new opportunities for innovation and the possibility of envisioning a future with more learning available to more learners. The first step in moving towards this future is challenging existing notions of what constitutes learning.





#### **FNDNOTES**

- Merriam, S., Caffarella, R., & Baumgartner (2006)Colley et al. 2003a; 2003b
- 2. Schugurensky (2000); Colley, Hodkinson, and Malcolm (2003); Merriam et al. (2006)
- 3. Bransford, Brown, & Cocking (2000)
- 4. Bransford, et al. (2000)
- 5. Lave & Wenger (1991)
- 6. Kolb (1984); Moore (2010)
- 7. Bandura (1977)
- 8. Brown & Mbati (2015)
- 9. Kirriemuir & McFarlane (2004)
- 10. Stone, Watts, & Zhong (2011)
- 11. Marsick & Watkins (1990); Dale & Bell (1999); Noe, Clarke & Klein (2014)
- 12. Hansson (2008); Greenstone & Looney (2011)
- 13. Ryan, Toohey & Hughes (1996); Zegwaard & Coll (2011)
- 14. Barnett (2012); Toumen, Leroux, & Beney (2012)

- 15. Brown & Duguid (1991)
- 16. Marsick & Watkins (1990); Eraut (2000); Le Clus (2011)
- 17. Dale & Bell (1999); Noe et al. (2014)
- 18. Senge (1990); Dale & Bell (1999); Noe et al. (2014)
- 19. White (2012)
- 20. O'Neill and Thompson (2013)
- 21. Gorard, Selwyn, & Williams (2000); U.S. Department of Commerce (2011)
- 22. Organization for Economic Co-operation and Development (2010)
- 23. Billett (2001); Misko (2008)
- 24. Billett (2001)
- Watkins & Marsick (1993); Fuller, Unwin, Felstead, Jewson,
  Kakavelakis, (2007); Misko (2008); Noe et al. (2014)
- 26. Dale & Bell (1999); Smith (2003)
- 27. Dale & Bell (1999); Manuti, Pastore, Scardigno, Giancaspro, & Morciano (2015)
- 28. Carliner, 2014

# **REFERENCES**

Bandura, A. (1977). Social learning theory. Englewood Cliffs, N.J.: Prentice Hall.

Barnett, K. (2012). Student interns' socially constructed work realities: narrowing the work expectation-reality gap. Business Communication Quarterly, 75(3), 271–290.

Billett, S. (2001). Learning through work: Workplace affordances and individual engagement. Journal of Workplace Learning, 13(5), 209–214.

Bransford, J., Brown, A., & Cocking, R. (2000). How people learn: Brain, mind, experience, and school. Washington D.C.: National Academies Press.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: toward a unified view of working, learning, and innovation. Organization Science, 2(1), 40–57.

Brown, T., & Mbati, L. (2015). Mobile learning: Moving past the myths and embracing the opportunities. Austin, TX: National Association of Business and Industry Associations. Carliner, S. (2014). 7 informal learning lessons. Training, 51(5), 30–33.

Colley, H., Hodkinson, P., & Malcolm, J. (2003). Understanding informality and formality in learning. Adults Learning (England), 15(3), 7–9.

Dale, M., & Bell, J. (1999). Informal learning in the workplace. DfEE Publications. Retrieved from http://webarchive.nationalarchives.gov.uk/20130401151715/http://www.education.gov.uk/publications/eOrderingDownload/RB134.pdf

Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. British Journal of Educational Psychology, 70, 113-136.

Fuller, A., Unwin, L., Felstead, A., Jewson, N., & Kakavelakis, K. (2007). Creating and using knowledge: An analysis of the differentiated nature of workplace learning environments. British Educational Research Journal, 33(5), 743–759.

Gorard, S., Selwyn, N., & Williams, S. (2000). Must try harder! Problems facing technological solutions to non-participation in adult learning. British Educational Research Journal, 26(4), 507–521.

Greenstone, M., & Looney, A. (2011). Building america's job skills with effective workforce programs: a training strategy to raise wages and increase work opportunities. Washington D.C.: Brookings Institution.

Hansson, B. (2008). Job-related training and benefits for individuals: A review of evidence and explanations. OECD education working papers, no. 19. OECD Publishing.

Kirriemuir, John, & McFarlane, Angela. (2004). Literature review in games and learning Bristol, UK: Futurelab. https://telearn.archives-ouvertes.fr/hal-00190453/document

Kolb, D. (1984). Experiential learning: Experience as the source of learning and development. City, New Jersey: Prentice Hall.

Lave, J., & Wenger, E. (1991). Situated learning: legitimate peripheral participation. New York, NY: Cambridge University Press.

Le Clus, M. (2011). Informal learning in the workplace: a review of the literature. Australian Journal of Adult Learning, 51(2), 355–373.

Manuti, A., Pastore, S., Scardigno, A., Giancaspro, M. L., & Morciano, D. (2015). Formal and informal learning in the workplace: A research review. International Journal of Training and Development, 19(1), 1–17.

Marsick, V., & Watkins, K. (1990). Informal and incidental learning in the workplace. New York, NY: Routledge.

Merriam, S., Caffarella, R., & Baumgartner, L. (2006). Learning in adulthood: A comprehensive guide. San Francisco, CA: Jossey-Bass.

Misko, J. (2008). Combining formal, non-formal and informal learning for workforce skill development. Adelaide, South Australia: National Centre for Vocational Education Research.

Moore, D. T. (2010). Forms and issues in experiential learning. New Directions for Teaching & Learning, 2010(124), 3-13.

Noe, R., Clarke, A., & Klein, H. (2014). Learning in the twenty-first-century workplace. Annual Review of Organizational Psychology and Organizational Behavior, 1, 245–275.

O'Neill, S., & Thomson, M. M. (2013). Supporting academic persistence in low-skilled adult learners. Support for Learning, 28(4), 162–172.

Organization for Economic Co-operation and Development. (2010). Are the A new Millennium learners making the grade?: Technology use and educational performance in PISA 2006, OECD, Paris, France

Ryan, G., Toohey, S., & Hughes, C. (1996). The purpose, value and structure of the practicum in higher education: a literature review. Higher Education, 31(3), 355-377.

Schugurensky, D. (2000). The forms of informal learning: Towards a Conceptualization of the field. Ontario: Centre for the Study of Education and Work.

Senge, P. M. (1990). The fifth discipline (1st edition). New York, NY: Doubleday Business

Smith, P. J. (2003). Workplace learning and flexible delivery. Review of Educational Research, 73(1), 53–88

Stone, R., Watts, K., & Zhong, P. (2011). Virtual reality integrated welder training. Welding Journal, 136s-141s.

Tough, A. (1978). The adult's learning projects: A fresh approach to theory and practice in adult learning. Toronto: The Ontario Institute for Studies in Education.

Tournen, C., Leroux, A., & Beney, S. (2012). What is learning during the first moments of work? Work, 41, 5231–5234.

US Department of Commerce. (2011). Exploring the digital nation: Computer and Internet use at home. Washington D.C.: author.

Watkins, K., & Marsick, V. (1993). Sculpting the learning organization: Lessons in the art and science of systematic knowledge. San Francisco, CA: Jossey-Bass.

White, P. (2012). Modelling the "learning divide": Predicting participation in adult learning and future learning intentions 2002 to 2010. British Educational Research Journal, 38(1), 153–175.

Zegwaard, K., & Coll, R. (2011). Using cooperative education and work-integrated education to provide career clarification. Science Education International, 22(4), 282–291.



ACT Foundation is a national nonprofit dedicated to helping young people achieve education and workplace success. Working with today's business, education, and philanthropy leaders, as well as tomorrow's visionaries, ACT Foundation invests in research, programs, and partner networks to increase educational and economic opportunity, particularly for low income, high-school, college, and young adult students working for while learning.



October 2016