

Annotated Bibliography

Workplace Learning



Workplace Learning Annotated Bibliography

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Introduction

You might be asking yourself "Why an annotated bibliography on Workplace Learning and why now?" And that's a fine question to ask! So much has changed just in the last 10 years in the area of what we know and understand about how people learn and how it applies in our human work places¹.

We've organized this annotated bibliography about Workplace Learning, including online readings and resources, books and journals to answer the following . . .

- What Is Workplace Learning?
- Why Workplace Learning and Why Now?
- How Do You Implement Workplace Learning?
- How Has Workplace Learning Been Implemented?

We invite you to explore and see how these resources can assist you in building your organization into a dynamic and flexible one, capable of meeting contemporary challenges.

Be sure and check out NIC's other Workplace Learning resources on our WPL project page at http://nicic.gov/TrainingDesignDevelopment, including NIC's Learning Center at http://nic.learn.com

¹ **How People Learn: Brain, Mind, Experience and School**. John D. Bransford, Ann L. Brown and Rodney R. Cocking, editors National Academies Press; 1st edition (September 15, 2000).

What is workplace learning?

Online Readings and Resources

Stats on Workplace Learning » Marcia Conner. (n.d.). Retrieved December 4, 2013, from http://marciaconner.com/blog/workplace-learning-stats/

This blog provides statistics on workplace learning and the training industry for areas such as: training expenditures, number of learning hours, spending by mature companies, and spending for social learning.

Hall, Amanda. December 2012. "Corrections Learning and Performance: A Vision for the 21st Century." http://static.nicic.gov/Library/026506.pdf

Anyone involved or interested in the future of learning and performance in corrections should read this publication. "This white paper focuses on learning and performance challenges in the 21st century including the role of technology in learning programs and the incorporation of evidence-based practices into program design and delivery. The paper offers an extensive review of learning research in the areas of theory, learners, learning organizations, instructional design, program design, delivery methods and modalities, learning transfer, and program assessment" (p. 2). Sections following an abstract include: the background of the National Institute of Corrections NIC) Academy; exploring and addressing challenges facing correctional learning professionals; research and theory—evidence-based practices; learners and learning; learning professionals; learning organizations; instructional design; methods and modality; transfer; assessment; and how to make and promote change. Appendixes cover theoretical models and implications for learning programs; the American Society for Training and Development (ASTD) Competency Model; and terms used (glossary).

Hart, Jane. May 7, 2010. "5 Stages of Workplace Learning," Social Media for Working & Learning, http://janeknight.typepad.com/socialmedia/2010/05/5-stages-of-workplace-learning.html, accessed August 16, 2010.

Jane Hart briefly describes what she sees as the stages of workplace learning and where most organizations fall, as well as provides an accompanying diagram illustrating the components of each stage. Hart also references other posts discussing stage 5, "collaborative learning/working," along with a reworked model of "Workscape Evolution" constructed by a colleague. Hart is a consultant known for her work in using technology in education, particularly social media. She is also the founder of the Center for Learning & Performance Technologies (http://c4lpt.co.uk/) whose website provides a wealth of resources on learning and social media.

Jennings, Charles. June 19, 2010. "Real Learning – Let's Not Confuse It with Completing Templated Exercises," *Improving Performance Through Learning Innovation, http://charles-jennings.blogspot.com/2010/06/real-learning-lets-not-confuse-it-with.html,* accessed August 16, 2010.

In response to a workplace learning blog post on traditional training design, development and Learning Management Systems (LMS), Jennings argues that compliance training should not be confused with "real learning" which is often the case. An LMS is designed to capture compliance training, not real learning which occurs within the "doing" of one's job. Jennings points out that trainers need to be able to use tools that fit their type of training and goals instead of fitting them to a predefined tool like an LMS. Jennings is a well-known and respected consultant in the field of workplace learning and blogs regularly on learning and performance topics.

Maddock, G. Michael, and Raphael Louis Vitn. February 17, 2010. "Knowing vs. Learning," *Bloomberg Businessweek,*

http://www.businessweek.com/managing/content/jan2010/ca20100119_962696.htm, accessed August 13, 2010.

Authors Maddock and Vitn explain why individual and organizational learning creates an innovative culture in comparison to individual and organizational "knowing." The authors associate learning with outcomes, explaining leaders who are willing to learn can create dynamic environments where shortcomings and lack of knowledge only motivates them to fill the gaps with learning. The authors are CEO and president of a consultant business that coaches businesses through the process of getting new products into the market.

Overton, Laura. July 23, 2010. "Is the Formal Training Room Obsolete?," *TrainingZone, http://www.trainingzone.co.uk/topic/learning-technologies/formal-training-room-obsolete/143936,* accessed August 2, 2010.

Overton's blog post on workplace learning is not a declaration that that classroom is dead but is instead something that can be enhanced with online tools. Barriers to formal classroom training such as not being able to meet "just-in-time" training needs along with time restraints are discussed. The article suggests positive ways in which organizations can integrate training innovations with traditional training. Laura Overton is the managing director of a non-profit organization involved with learning and technology.

Sfard, Anna. 1998. "On Two Metaphors for Learning and the Dangers of Choosing Just One." *Educational Researcher* 27(2):4-13. Retrieved from https://www.msu.edu/~sfard/two%20metaphors.pdf.

Professor Sfard, associated with the Institute of Education, University of London (among other universities), explores the ways in which we think of learning as either something to

be acquired or something in which we participate. Although Sfard's abstract describes her goal as neither defending one model over another, she does focus much of the article exploring a degree of validity to the "Acquisition Metaphor." Her conclusion, however, is that the cultural strength of metaphor leads our efforts in a particular area and is reason enough to embrace more than one learning model so as not to risk excluding other models and their individual advantages.

Vaughan, Karen. 2008. "Workplace Learning: A Literature Review." Retrieved from http://akoaotearoa.ac.nz/download/ng/file/group-189/n1575-workplace-learning-aliterature-review.pdf.

This report was prepared by the New Zealand Council for Educational Research for a food and manufacturing company to outline the practice of workplace learning as well as best practices. Vaughan recognizes that the field of workplace learning borrows from other areas of study such as management, learning and human resource theory. By selectively reviewing the literature on this topic, the report gives a concise and excellent overview of workplace learning that can be understood by anyone interested in how learning can be accomplished at the workplace. The author provides clear charts and tables that illustrate complex concepts and is particularly useful when outlining best practices.

Books

Argyris, Chris and Donald A. Schön. 1978. Organizational Learning: A Theory of Action Perspective. Reading, MA: Addison Wesley.

The authors approach organizational learning with an "intervention-oriented" perspective. The book is divided into four parts: Part 1 –what is organizational learning, Part 2 – how organizations facilitate single-loop learning and inhibit double-loop, Part 3 – describes a model of a double-loop learning system, and Part 4 – examines six cases with alternative approaches to intervention.

Biech, Elaine. 2005. Training for Dummies. Indianapolis, IN: Wiley Publishing.

This book covers the basics of training in six parts: what is training and what does a trainer do; how to design training for the learner; how to deliver a successful training; keys to evaluation and the need for follow-up; the importance of being a lifelong learner; and six concise chapters with tips, techniques, and tidbits on training.

Biech, Elaine. 2008. *ASTD Handbook for Workplace Learning Professionals*. Baltimore, MD: ASTD Press.

The ASTD handbook covers the major elements of workplace leaning written by professionals considered experts in their field. Sections include: perspectives on learning in

the workplace; assessing and analyzing needs; designing, developing and delivering learning; measuring and evaluating learning; and applying and managing learning in the workplace. This handbook in not necessarily application-based, but instead gives those interested in the topic a solid theoretical grounding in what comprises workplace learning and why these issues are important to contemporary organizations and companies. Editor Elaine Biech has worked in this area of study for over 30 years and whose consulting company assists organizations transition through large scale change.

Boud, David and John Garrick. 2001. *Understanding Learning at Work*. Taylor & Francis e-Library. http://books.google.ca/books/about/Understanding_Learning_at_Work.html?id=QYz24vQ0N xIC

This book contains 14 articles on learning and work that focus on the following: (1) expectations about learning at work into the next century; (2) learning theories, practice, and performance implications; (3) the relationship between workplace learning and other forms of life-long education; (4) international developments in competency-based approaches to learning and assessment; and (5) the influence of language, power, culture, and gender upon the construction of learning. The following articles are included: "Understandings of Workplace Learning" (David Boud, John Garrick); "The Changing Contexts of Work" (Catherine Casey); "Learning to Work and Working to Learn" (Ronald Barnett); "New Dimensions in the Dynamics of Learning and Knowledge" (Judith Matthews, Philip Candy); "Finding a Good Theory of Workplace Learning" (Paul Hager); "Past the Guru and up the Garden Path: The New Organic Management Learning" (David Beckett); "Gendered Workers and Gendered Work: Implications for Women's Learning" (Belinda Probert); "Culture and Difference in Workplace Learning" (Nicky Solomon); "Technologising Equity: The Politics and Practices of Work-Related Learning" (Elaine Butler); "Guided Learning at Work" (Stephen Billett); "Is Learning Transferable?" (Mark Tennant); "Competency-based Learning: A Dubious Past--An Assured Future?" (Andrew Gonczi); "Envisioning New Organizations for Learning" (Victoria Marsick, Karen Watkins); and "The Dominant Discourses of Learning at Work" (John Garrick). [Abstract from ERIC]

Hager, Paul. 2005. "Current Theories in Workplace Learning: A Critical Assessment." In Nina Bascia (ed.), *International Handbook of Educational Policy*. Dordrecht, NL: Springer, vol.13, pp. 829-46.

Hager, Associate Professor of business at the University of Technology (Sydney), gives a succinct and thorough historical context to workplace learning. He addresses how past issues have evolved into a few salient issues: our understating of how to best learn; individual learning versus learning that occurs within a group; learning through observing and participation versus formal classroom learning; and organizational environments that best facilitate learning in the workplace. The historical background and contemporary issues in the field offered by Hager can be appreciated by anyone interested in this area of study, through there are sections that might be difficult for those with no background on

particular theoretical issues. It may interest some to read the entire Section 5 of this publication which is dedicated to topics in workplace learning.

Kouzes, Jim and Barry Posner. 1995. *The Leadership Challenge: How to Keep Getting Extraordinary Things Done in Organizations* (2nd ed.). San Francisco: Jossey-Bass.

Citing Kouzes and Posner, "The Leadership Challenge is about how leaders get extraordinary things done in organizations. It's about the practices leaders use to turn challenging opportunities into remarkable successes." This second edition is expanded with interviews and a questionnaire survey of more than 3000 leaders. Chapters cover five fundamental practices of exemplary leadership: challenge the status quo; inspire a shared vision; enable others to act; model the way forward; and encourage the heart.

Knowles, Malcolm S., Elwood F. Holton III, and Richard A. Swanson. 2011. *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (7th ed.). Burlington, MA: Elsevier.

Now in its seventh edition, Knowles' The Adult Learner is one of the seminal works in the field of adult education. This edition has been updated by two experts in the field to incorporate recent research in educating adults. The sections in the original text have been preserved and which include: principles of andragogy and learning theory, current practice, and further readings. Knowles is known for developing the theory of andragogy, learner-centered education, within the field of adult education as well as the human resource development style inventory, both of which are covered in this text. The later will be particularly useful to trainers who work with adults.

Rothwell, William. 2005. *Beyond Training and Development: The Groundbreaking Classic on Human Performance Enhancement*, 2d ed. New York: AMACOM.

First published in 1996, this revised handbook on the components of human performance evaluation (HPE) has been revised to incorporate current thinking in the field. Closely associated with workplace learning, the focus of HPE is to move from training for the sake of training to training for performance. The author opens the book with a well-grounded explanation of what HPE is and how it relates to performance in the workplace. The remaining sections broadly address issues such as how to analyze performance issues in your organization, how to improve those areas, and evaluating your efforts. Each section begins by describing important aspects of how to think about these training issues in a more effective way.

Raelin, Joseph A. 2008. *Work-Based Learning: Bridging Knowledge and Action in the Workplace,* Revised ed. San Francisco: Jossey-Bass.

Within the field of workplace learning there are multiple learning strategies: action learning, communities of practice, etc. In Raelin's work, he describes each strategy, beginning the volume with an explanation of why workplace learning is important and what it is composed of. This is a revised edition of a 2000 publication that addresses new research and developments in the field such as virtual team learning, global action learning and collaborative leadership. The book proves to be a good introduction to learning styles to those who are unfamiliar with them as well as a practical guide to implementing workplace learning.

Swanson, Richard A., and Elwood F. Holton. 2009. *Foundations of Human Resource Development,* 2d ed. San Francisco: Berrett-Koehler Publishers.

With learning and performance at its core, it is easy to see why human resource development (HRD) is a closely related discipline to workplace learning. Swanson and Holton, both professors in the field of HRD and education respectively, introduce the discipline by way of its close association to other fields. An in-depth chapter is dedicated to using training and development to create expertise within the workplace. The remaining chapters on individual and organizational performance will be helpful to any training processional. Now in its second edition, the first publication of this title won the Book of the Year Award from the Academy of Human Resource Development.

Tight, Malcolm. 2003. Key Concepts in Adult Education and Training, 2d ed. New York: Routledge.

Best used as a reference for either new or even long-time professionals, Tight's publication takes numerous educational and training concepts and categorizes them together with short introductions on each concept. In a field such as workplace learning, where numerous disciplines such human resource development, organizational learning, and educational concepts such as andragogy and experiential learning are closely intertwined, a book such as will quickly give a trainer their bearings along with providing references to related publications. Tight is a British professor of education.

Journal Literature

Baldwin, T.T. and K.J. Ford. 1988. "Transfer of Training: A Review and Directions for Future Research." *Personnel Psychology* 41: 63-105.

Transfer of training is of paramount concern for training researchers and practitioners. Despite research efforts, there is a growing concern over the "transfer problem." The purpose of this paper is to provide a critique of the existing transfer research and to suggest directions for future research investigations. The conditions of transfer include both the generalization of learned material to the job and the maintenance of trained skills over a period of time on the job. The existing research examining the effects of training design, trainee, and work-environment factors on conditions of transfer is reviewed and critiqued.

Research gaps identified from the review include the need to (1) test various operationalizations of training design and work-environment factors that have been posited as having an impact on transfer and (2) develop a framework for conducting research on the effects of trainee characteristics on transfer. Needed advancements in the conceptualization and operationalization of the criterion of transfer are also discussed. (Journal abstract)

Cheng, Eddie W. L., and Ian Hampson. 2008 "Transfer of Training: A Review and New Insights." *International Journal of Management Reviews* 10(4):327-341.

Within the field of workplace learning, the idea of simply "transferring" knowledge has been replaced with various approaches to learning. However, within any learning environment knowledge transfer is still an important element and continues to be articulated by organizations through policies involving training and performance. Cheng reviews the literature on traditional transfer theory and discusses gaps in research that show transferring knowledge into practice is still an important issue when considering training outcomes. (Full article available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2370.2007.00230.x/abstract)

Dailey, Nancy. 1984. "Adult Learning and Organizations." *Training & Development Journal* 38(12):64.

Dailey addresses two learning models that define organizational learning and culture, pedagogical and andragogical, and they ways in which they hinder or facilitate learning within an organization. Pedagogy, a highly structured, authority-based model associated with traditional bureaucracies is contrasted with andragogy, an open, more flexible and creative model that facilitates learning. A comparative table of the two theories is provided and serves as a good primer for these models which are often associated with learning in organizations.

Fenwick, Tara. 2008. "Workplace Learning: Emerging Trends and New Perspectives." *New Directions for Adult & Continuing Education* 119(Fall):17-26.

Fenwick identifies two persistent questions pertaining to workplace learning: problem solving in the workplace and group learning. She continues on to explore the shifting outlook from learning as simply acquiring new skills to what has been termed "communities of practice"; the growing importance of individuals' workplace identities and how one becomes "literate" in their community of practice; and how power relations relate to and influence workplace learning. This is a brief but thorough overview of current issues that continue to develop in the field that anyone with even a basic understanding of workplace learning will appreciate. Tara Fenwick is Associate Professor of Adult Education at the University of Alberta and has published widely in the area of workplace learning,

professional lifelong learning and teacher development. (Full article available at: http://onlinelibrary.wiley.com/doi/10.1002/ace.302/abstract)

Hager, Paul. 2004. "Conceptions of Learning and Understanding Learning at Work." *Studies in Continuing Education* 26(1):3-17.

One of the essential aspects of workplace learning, viewing learning as a process rather than a product, is discussed. Hager argues that workplace learning is a much more complex and rich system compared to the more common perception of learning as "unproblematic." He explains the various problems associated with the "learning as product" view and provides response to each using current educational thought. Hager also includes an in-depth look at how learning is currently viewed, which will provide any reader with a solid grounding in its relationship to workplace learning. (Full article available at: http://www.tandfonline.com/doi/abs/10.1080/158037042000199434)

Journal of Workplace Learning. Bingley, UK: Emerald Group Publishing Limited.

Published eight times annually, this publication focuses on issues surrounding learning, knowledge management and training. Content is research based and the publication overall is intended to show the benefits of taking a well-informed perspective when applying workplace learning concepts. Anyone involved in training and development will find this journal to be informative along with having practical applications. (Journal available at: http://www.emeraldinsight.com/products/journals/journals.htm?id=jwl)

Wilkins, David. 2009. "Learning 2.0 and Workplace Communities." *T+D* 63(4):28.

Learning 2.0 is a contemporary model of learning generally termed "social learning," that includes embedded, wrapped and community learning. Wilkins argues that social learning should not be pursued as something to replace formal learning models, but something to be integrated and ultimately enhancing formal strategies. Giving a definition and brief overview of each model, the author explains the benefits of each. Wilkins is the senior director of a social software learning company. (Full article available at: http://www.astd.org/Publications/Newsletters/Learning-Circuits/Learning-Circuits-Archives/2009/08/Learning-20-and-Workplace-Communities)

Why workplace learning and why now?

Online Readings and Resources

Downes, Stephen. (2005, October 15). E-Learning 2.0. Message posted to http://www.downes.ca/post/31741.

This article covers the current state of e-learning today, trends for the future, the impact of Web 2.0, and what E-Learning 2.0 does and will look like.

Gram, Tom. March, 9, 2009. "The Big Question: Workplace Learning in 10 Years," *Performance by Design, http://gramconsulting.com/2009/03/the-big-question/*, accessed August 17, 2010.

In response to The Learning Circuits Blog "question of the month" posed to thought leaders in the area of workplace learning, Gram discusses what training will look like in the future. In the spirit of Peter Drucker's notion of predicting the future by creating it, Gram looks at what direction training should be taking instead of what direction training seems to heading. The author cites eight hopeful possibilities for the future of training, some of which include less formal training and more informal learning, merging work and learning, and less measurement focus and more process data focus. Tom Gram is a performance consultant who works with organizations to improve their workplace learning and technology use.

Hart, Jane. Updated September 27, 2010. "State of Learning in the Workplace Today." *Centre for Learning and Performance, http://www.slideshare.net/janehart/the-state-of-learning-in-the-workplace-today,* accessed August 3, 2010.

In Hart's account of the current state and future of workplace learning, she discusses what it has consisted of in the past and what training currently looks like for most businesses and organizations. Hart also outlines trends that will influence training in the future: financial pressures, informal learning, worker autonomy, dynamic learning, the social media revolution, IT consumerism, inadequate learning systems, new learning approaches, lessening confidence in training and development, and new business models. Heart is a consultant known for her work in using technology in education, particularly social media. She is also the founder of the Center for Learning & Performance Technologies (http://c4lpt.co.uk/) whose website provides a wealth of resources on learning and social media.

Hart, Jane. Updated July 5, 2013. "The Workplace Learning Revolution." *Centre for Learning and Performance, http://c4lpt.co.uk/new-workplace-learning/*, accessed October 29, 2013.

"This free mini-ebook version shows how the Internet has dramatically changed the way we live, and is now changing the way we learn."

Jarche, Harold. October 21, 2009. "The Future of the Training Department," *Life in Perpetual Beta, http://www.jarche.com/2009/10/the-future-of-the-training-department-2/*, accessed August 17, 2010.

Jarche's article opens with a brief history of how work has been traditionally organized and what that has meant for training and training departments in particular. Three aspects of training are now shifting: the degree of complexity of both work and the workplace; an inversion of the organizational pyramid; and growing acceptance of alternate and different models of learning. Harold Jorche works extensively with organizations on issues such as organizational change involving workplace learning and technology.

Jennings, Charles. 2010. "Learning on the Job." *Global Focus* 4(1), http://www.efmd.org/images/stories/efmd/globalfocus10/Issue_1_2010_cjennings.pdf, accessed August 2, 2010.

In response to financial restraints along with developments in educational technology, business is relooking at workplace learning. Learning in the workplace for the past century has depended on a formal model of classroom based learning, but new models of learning have arisen with an emphasis on "just-in-time" learning. Jennings highlights the importance of continuous learning in a world where 40% of workers are "knowledge workers" and learning on an ongoing basis is even more important. Jennings is a well-known and respected consultant in the field of workplace learning and blogs regularly on learning and performance topics.

Vander Ark, Tom. April 3, 2010. "The 3x5 Learning Revolution," *Huffington Post, http://www.huffingtonpost.com/tom-vander-ark/the-3x5-learning-revoluti_b_524184.html,* accessed August 2, 2010.

If anything will change learning, technology will. That is essentially the position that Vander Ark takes in his article in the Huffington Post. He lists 15 technological drivers, shifts and contexts that have already transformed other industries and which will increasingly influence learning. This article serves a short and concise checklist of technologies trainers should be aware of and with which possibly enhancing their training. Vander Ark highlights some important issues that will be facing corporate trainers such as individualized learning and digital natives. Vander Ark is a partner in an education firm and writes extensively at his blog <code>www.EdReformer.com</code>.

Books

Ashton, D. N., and Johnny Sung. 2002. *Supporting Workplace Learning for High Performance Working*. Geneva: International Labour Office.

Ashton and Sung cite two strategic reasons for supporting workplace learning. The first is the increased demand in the workforce for highly technical and professional workers, which has outpaced supply. They also discuss the trend toward high performance organizations (HPWOs) where continual learning is expected and supported by management. Evidence of the value of workplace learning is provided in two studies that cite higher productivity for HPWO companies as well as increasing the skills for workers.

Clawson, James G., and Marcia Conner. 2004. *Creating a Learning Culture: Strategy, Technology, and Practice.* New York: Cambridge University Press.

With less hierarchy in organizational structures and growing reliance on individual leadership and collaboration, the authors of *Creating a Learning Culture* focus on the importance of learning each day and in all situations. Contributors from leading companies, such as Xerox and Home Depot, provide examples of different successful approaches to learning at work. These approaches are aimed at workers at all levels of the organization and those operating in a low or unstructured environment.

Elkeles, Tamar, and Jack Philips. 2006. *The Chief Learning Officer: Driving Value within a Changing Organization through Learning and Development*. Oxford: Butterworth-Heinemann.

In an uncertain economy and a highly competitive business climate, Elkeles and Philips stress the importance of focusing limited learning resources on meeting critical business goals. Nine strategies are provided detailing how the Chief Learning Officer (CLO) can add significant value to the organization through workplace learning. To make learning programs successful, CLOs must align with business measures, such as innovation and return on investment.

Israelite, Larry. 2006. *Lies About Learning: Leading Executives Separate Truth from Fiction In a \$100 Billion Industry.* Alexandria, VA: ASTD Press.

In almost any training discussion, invariably the topic of evaluation, results or return on investment arise. To be able to somehow probe the insights of executives on these and other workplace learning topics would be invaluable to any trainer. This is exactly what Israelite has done with *Lies About Learning* by soliciting those exact insights from 12 high-level executives. Topics or "lies" covered in the text include learners, training design, chief learning officers, consultants, managing training, e-learning and technology. Israelite himself is the Director of Human Resource Development at Liberty Mutual Group.

Kirkpatrick, James D. and Wendy Kayser Kirkpatrick. 2010. *Training on Trial: How Workplace Learning Must Reinvent Itself to Remain Relevant.* New York: AMACOM.

Comparing the defense of training to a defendant's case in a trial, Training on Trial argues that workplace learning must better align with business strategies to remain viable.

Without this alignment, training is seen as a cost center and is at constant risk of budget cuts. To ensure training departments are successful once aligned, a "four-level evaluation model" is provided for measuring training programs, with particular focus on the degree to which training goals are met and why particular programs succeed.

Malloch, Margaret, Len Cairns, Karen Evans, and Bridget N. O'Conner. 2010. *The SAGE Handbook of Workplace Learning*. London: SAGE Publications.

This SAGE Handbook provides a state-of-the-art overview of the field of workplace learning internationally. The assembled authors are all well-placed theoreticians, researchers and practitioners in this burgeoning field of educational endeavor which is now across higher education, vocational education and training, post-compulsory secondary schooling and lifelong education. The premise of the volume is that it is both timely and necessary for a broad based, yet incisive analysis of the range of theory, research and practical developments in this now prominent field of educational activity. (Abstract from Introduction)

Rothwell, William J., John Edwin Lindholm, and William G. Wallick. 2003. *What CEOs Expect From Corporate Training: Building Workplace Learning and Performance Initiatives That Advance Organizational Goals*. New York: AMACOM.

This publication comprises interviews from CEOs throughout across industries on today's business challenges and provides a framework for how workplace learning can help meet business goals. The CEOs interviewed also give their perspective on the success or failure of past workplace learning initiatives and the different roles managers, analysts and developers play in learning programs. Finally, guidelines are provided on how to create an action plan for workplace learning with these roles in mind.

Journal Literature

Ananiadou, Katerina, Andrew Jenkins, and Alison Wolf. 2004. "Basic Skills and Workplace Learning: What Do We Actually Know About Their Benefits?" *Studies in Continuing Education* 26(2):289.

In anticipation of a demand for higher skilled workers by the year 2030, this paper provides a literature review focusing on the impact of both workplace learning and basic skills on wages and employment. This study of the literature is specifically aimed at individual training and distinguishes between training provided by the employer and outside training with employer training having a more notable positive effect. The results show workplace learning having a significant positive influence on wages, however, basic skills training does not show a correlation to increased wages or higher chances of employment. (Full article

available at:

http://www.tandfonline.com/doi/abs/10.1080/158037042000225263?journalCode=csce20)

Broad, Mary L. 1982. "Management Actions to Support Transfer of Training." *Training and Development Journal* 36(5):124-130.

Reports results of a questionnaire which asked human resource development leaders to identify and rate the importance of actions management can take to support the transfer of training to the job. The categories of actions were upper management involvement, pretraining preparation, support during training, job linkage, and followup. (Abstract from ERIC: Education Resources Information Center)

Davenport, Rex. 2006. "Future of the Profession." *T+D* 60(1):41.

T+D editor Rex Davenport outlines the case for a commitment to workplace learning, advocating a model of learning while doing rather than formal training. Not only are more companies increasingly supporting the concept, but the future is geared toward continuous learning in the workplace. Learners willing to learn when the need presents itself will benefit more than those simply participating in company training. The article presents interesting statistics, including delivery of training and dollars spent in the area of workplace learning.

Hayes, Thomas J. 2001. "Evidence of Effectiveness in Training Programs." American Jails 15(2):73.

This article focuses specifically on workplace learning in corrections. Benefits of workplace learning are provided relative to corrections officers, inmates and the public. Liability reduction is noted as the area of workplace learning that requires the most rigor with a strong need for effective evaluation of training results. Academic and procedural training are also discussed, but require less proof of training effectiveness.

How MOOCs Will Revolutionize Corporate Learning And Development - Forbes. (n.d.). Retrieved December 4, 2013, from http://www.forbes.com/sites/jeannemeister/2013/08/13/how-moocs-will-revolutionize-corporate-learning-development/

Jeanne Meister's blog post covers the history, definition, key elements, and potential value of MOOCs in corporate learning.

INFOGRAPHIC: Why Mobile Learning is the Future of Workplace Learning - WiredAcademic. (n.d.). Retrieved December 4, 2013, from http://www.wiredacademic.com/2013/04/infographic-why-mobile-learning-is-the-future-of-workplace-learning/

This infographic on mobile learning covers the trends in a "mobile world", the changing workplace, and the opportunity for mobile learning at work.

Rowden, Robert W., and Clyde T. Conine. 2004. "The Relationship Between Workplace Learning and Job Satisfaction in U.S. Small Commercial Banks." *Journal of Business and Entrepreneurship* 17(4):215, http://onlinelibrary.wiley.com/doi/10.1002/hrdq.1041/citedby, accessed September 15, 2010.

Rowden and Conine discuss the value of workplace learning, by focusing on the effect it can have on job satisfaction. By studying small businesses, they provide research on a segment of workplace learning employees which have been typically ignored. Both formal and informal learning are reviewed along with the expenditures for both types of learning. Results show a strong relationship between workplace learning and nine distinct aspects of job satisfaction.

Sussman, Dan. 2005. "What HPLOs Know." *T+D* 59(8):35.

From a 2004 study, consultant group Accenture Learning identified high-performing learning organizations and outlined seven traits they shared. The report discusses issues such as aligning training objectives with business objectives, measuring the training's impact, creating value through innovative learning opportunities and marketing that value, using blended learning techniques to broaden employees learning interactions.

Wadhwa, Vivek. March 27, 2010. "Why America Needs to Start Educating Its Workforce Again," *TechCrunch, http://techcrunch.com/2010/03/27/why-america-needs-to-start-investing-in-its-workforce-again-2/*, accessed August 2, 2010.

Citing both IBM's approach in the 1940s-1970s and India's approach today, Wadhwa's article makes the argument that workplace learning is critical to retaining workers and growing businesses in a competitive environment. Five Indian IT companies use intensive entry level and ongoing training to raise below-par college graduates to required levels and to develop future managers and leaders. These companies are shown to have lower employee turn-over and higher industry growth rates when compared to Silicon Valley.

How do you implement workplace learning?

Online Readings and Resources

ASTD Certification Institute. 2011. Social Learning Update to the CPLP Candidate Bulletin. Retrieved from http://www.astd.org/Certification/For-

Candidates/~/media/Files/Certification/Competency%20Model/SocialLearning1.ashx

This update "explores the use of social media and social learning tools in the workplace and how they change the landscape of the learning and performance field". Main sections are described as: Identify the uses and benefits, application, advantages, and disadvantages of social learning technologies; Discuss the barriers to implementing and gaining acceptance of social learning technologies; Explain strategies to influence others & increase acceptance of social learning tools; and Indicate approaches for increasing user adoption.

Bozarthzone. http://bozarthzone.blogspot.com/.

Jane Bozarth's blog, *Bozarthzone*, is dedicated to issues involving e-learning and training and development issues. Bozarth is a prolific writer in the area of technology and training, with well-known titles to her credit such as *Better Than Bullet Points*, *From Analysis to Evaluation*, *E-learning Solutions on a Shoestring* and *Social Media for Trainers*. Bozarth also contributes to numerous other training websites including a monthly article column in the online *Learning Solutions Magazine*.

Bozarth, Jane. 2010 "Nuts and Bolts: Getting Management Support for Training." *Learning Solutions Magazine*, http://www.learningsolutionsmag.com/articles/484/nuts-and-bolts-getting-management-support-for-training, accessed August 2, 2010.

Bozarth, a well-known consultant, writer and blogger on e-learning and learning in the workplace, notes that often learners return to their workplace and encounter barriers from managers in transforming their training into performance. She offers nine tips for trainers to overcome these barriers starting as early as the development phase of training. Many of her suggestions involve engaging managers throughout the process of training from development to marketing to evaluation. Bozarth is well known and respected in the training field and has published extensively on this topic both in print and online.

Clark, Ruth Colvin. (2012, July 16). Blended Learning is Better Than Instructor-Led or Online Learning Alone. Message posted to http://www.astd.org/Publications/Blogs/L-and-D-Blog/2012/07/Blended-Learning-Is-Better-Than-Instructor-Led-or-Online-Learning-Alone.aspx

This blog post compares training delivery approaches, referencing a 2010 study on the effectiveness of face-to-face instructor-led training, online learning, and blends of both. The author notes the study results show blends to be more effective and discusses why.

"Drilling to the Core of Training and Education." Accessed December 4, 2013. http://www.astd.org/Digital-Resources/Podcasts/TD/2013/09/Drilling-to-the-Core-of-Training-and-Education.

This podcast from ASTD covers how an oil company "facing a wave of retirements and a shortage of experienced replacements...developed a comprehensive development program for employees at all stages of their careers".

"From Research to Application: The Case for Learning and Performance." 2013. http://nicic.gov/Library/026893.

Are you interested in getting more bang for your training buck? Leveraging the impact of your training department? Being effective with the training you prepare for, design, deliver and transfer into the workplace? Following the science of learning into practice? And you know that "content covered is not content learned?" Then this blended, interactive training broadcast / experience can assist with a transformation of your training department / unit into a center of learning and performance that can directly impact employee on-the-job performance. During this national training program sponsored and broadcast by the National Institute of Corrections on January 16 and 17, 2013, facilitators will: Identify the role of the agency leadership, agency supervisor, trainer and learner in preparation for training and the influence that role has on performance; Explore the research regarding the management of content and its impact on learning and performance; Explore the importance of providing learners the opportunity to practice new skills and knowledge and the effect that has on performance; and Discover the connections between performance expectations, evaluation and transfer of learning and how they affect the learner. Also included are the Facilitator Manual, Participant Guide, and PowerPoint slides from the twoday presentation.

Jane Hart - 12 Steps To Successful Social Learning at Work: Learning Technologies 2013 - YouTube. (n.d.). Retrieved December 4, 2013, from http://www.youtube.com/watch?v=r1jZp00At0M

This YouTube video (37 minutes) provides 12 tips for supporting a successful social collaboration initiative. It addresses questions such as: What is the right technology to use for your initiative? and What should your role be in the process?

Hart, Jane. 2012. Internet Time Alliance white paper "Learning in the Social Workplace." Retrieved from http://internettimealliance.com/wp/wp-content/uploads/2011/11/liswpwp.pdf.

Social technologies are impacting the way we learn and work in the workplace. Here [are] three key areas:

- 1. How individuals are using social media to address their own learning and performance needs
- 2. How organisations are using social technologies
- 3. How frameworks are guiding new organisational approaches to supporting workplace learning (From introduction)
- Jennings, Charles, May 28, 2010, "ID Instructional Design or Interactivity Design In an Interconnected World?, *Improving Performance Through Learning Innovation*, http://charles-jennings.blogspot.com/2010/05/id-instructional-design-or.html, accessed August 2, 2010.

In this article, Jennings challenges readers to rethink instructional design in terms of interactivity design. For static "events," or formal training, instructional design is important. However, it does not translate into dynamic events that occur at the time of need in the midst of a workplace process. Jennings continues to discuss the difference between "content–poor" and "interaction-poor" design citing research that shows that simply because you know something does not mean that you learned. An interesting and concise article about the problems of traditional instructional design, Jennings about points the reader toward resources in this area. Jennings is a well-known and respected consultant in the field of workplace learning and blogs regularly on learning and performance topics.

Jennings, Charles, April 7, 2010, "Five Barriers to Effective Learning Organizations," *Improving Performance Through Learning Innovation, http://charles-jennings.blogspot.com/2010/04/five-barriers-to-effective-learning-in.html*, accessed August 2, 2010.

Jennings, a frequent blogger on timely issues involving workplace learning, lists five barriers to creating both relevant and effective learning programs. The five barriers include (1) Efficiency, (2) Inertia, (3) Convenience, (4) Training mindset, and (5) Manager engagement. Many of Jennings suggestions asks trainers to rethink some of trainings most common problems such replacing a learning approach with a performance approach and replacing a focus on "product" with a focus on "process." Jennings is a well-known and respected consultant in the field of workplace learning and blogs regularly on learning and performance topics.

Kelly, David. 2012, March 20. Curation: A Core Competency for Learning Professionals. Message posted to http://learningcircuits.blogspot.com/2012/03/curation-core-competency-for-learning.html

This blog post describes the role of curation in a museum and how curation can be used in the work environment to capture informal learning.

Learning Circuits: ASTD's Source for e-Learning.

http://www.astd.org/Publications/Newsletters/Learning-Circuits.

The Association Society for Training & Development (ASTD) publishes *Learning Circuits* as a monthly online magazine for training professionals interested in e-learning. Articles focus on new technologies and their use in workplace learning and how existing technologies are being utilized in learning environments. It also includes case studies and industry headlines.

Little, Josh, April 7, 2010, "5 Tips for Knowledge Gardeners: How to Grow a Collaborative Learning Community," *Learning Solutions Magazine*,

http://www.learningsolutionsmag.com/articles/443/5-tips-for-knowledge-gardeners-how-to-grow-a-collaborative-learning-community, accessed August, 2, 2010.

Little, an advocate of collaborative learning in the workplace, gives trainers five suggestions on creating a collaborative learn/work space. Using the analogy of the garden, Little recommends finding your ideal group of learners, creating the right environment for sharing, gathering the right tools, putting in the required time and effort and maintaining the learning environment you have grown. Little has worked as a corporate trainer and is the founder of three workplace learning firms.

Top 100 Tools for Learning 2013. (n.d.). Retrieved December 4, 2013, from http://www.slideshare.net/janehart/top-100-tools-for-learning-2013

Starting with Twitter, Jane Hart provides a list and links to the Top 100 Tools. This list "was compiled from the votes of over 500 learning professionals in workplace learning and education from 48 countries worldwide in the 7th Annual Survey, by Jane Hart, Centre for Learning & Performance Technologies".

Wilhelm, Warren. "Sustaining Organizational Learning." *T+D* 64, no. 5 (May 2010): 52. Podcast: http://www.astd.org/NR/rdonlyres/AF38EC07-897E-4679-B52D-89B4B6423A23/0/SustainingOrganizationalLearning.mp3

During times that are economically challenging, training budgets are often the first to be cut. Author Warren Wilhelm challenges trainers not only to the think about the value added by the work begin accomplished by training departments but also to be able to articulate them to their organizations' decision makers. Wilhelm gives over a dozen short yet concise reasons for organization's to maintain training initiatives as well as suggestions on how to guide budget decisions to maintain essential learning when cuts are unavoidable. Wilhelm is a consultant in the field of workplace learning.

Books

Bernthal, Paul. 2004. *ASTD 2004 Competency Study: Mapping the Future.* Alexandria, VA: ASTD Press.

This report from the American Society for Training and Development (ASTD) outlines trends in the field of workplace learning. The main goal of the publication is to set a framework of competencies that will be needed by training processionals, the roles they will play in their organization's learning culture, as well as the areas of expertise (AEO) they will be expected to come to the table with to be relevant and successful in today's organizations. This manual is a resource that has obvious value to training professionals in their endeavor to evaluate their training team, objectives and goals. However, it will also prove a valuable tool for executives looking to transform this area of their organization as it will serve as a primer on what they should be looking for in both their trainers' skills and the work they accomplish.

Bingham, Tony and Marcia Conner. 2010. *The New Social Learning: A Guide to Transforming Organizations Through Social Media*. Alexandria, VA: ASTD Press.

The New Social Learning explores the "application of social media in all aspects of talent management: recruitment, engagement, retention, capacity, and capability." (pg. xviii) The authors demonstrate the power of social learning by sharing stories from companies realizing impact on both their business and employees. Chapters focus on a social media category, such as "growing collective intelligence", and its application.

Blackwell, Jeanine O'Neill, and Bernice McCarthy. 2007. *Hold On, You Lost Me! Use Learning Styles to Create Training that Sticks.* Alexandria, VA: ASTD Press.

This text by Blackwell and McCarthy is based on the 4MAT training model that emphasizing the use of learning styles. This method translates the ways in which people perceive and process their environment into four learning styles. The text gives trainers an 8-step process for developing training that works for all four learning styles. A unique aspect of the text is that it encourages trainers to evaluate their own natural style that has influenced how they have traditionally developed and delivered training. Bernice McCarthy is a well-known and respected education consultant.

Broad, Mary L. and J.W. Newstrom. 1992. *Transfer of Training: Action-Packed Strategies to Ensure High Pay-Off from Training Investments*. Reading, MA: Addison-Wesley.

This book is intended to help managers, supervisors, and employees in U.S. organizations achieve full job performance by acquiring and applying effective strategies to transfer the knowledge and skills learned in training to the workplace. The book is divided into four parts. Part 1 covers the following aspects of the groundwork of transfer of training: human

resources development and the transfer problem, barriers to and management of transfer of training, and key roles and times to support transfer. The chapters included in part 2 present transfer strategies for use before, during, and after training and a special action-planning relapse prevention strategy. Part 3, which is devoted to using and supporting transfer in organizations, contains a chapter on the applications of the principles of transfer of training in organizations and a chapter on building and managing a transfer system. (Abstract from ERIC: Education Resources Information Center)

Clark, Ruth Colvin. 2010. *Evidence-Based Training Methods: A Guide for Training Professionals.*Alexandria, VA: ASTD Press.

As in many fields, trainers are giving more attention to evidenced-based methods that have proven positive and effective outcomes. Clark begins by briefly surveying selected research in the field of adult learning including a discussion on how the brain works. What may be the most interesting to trainers are the following chapter on "learning architectures" that outline practical way in which to effectively use visuals, words, examples and practice. Clark is an expert in instructional design and has written extensively on workplace learning and adult education and had received many accolades for her work in this area.

Clifford, Jackie, and Sarah Thorpe. 2007. *Workplace Learning & Development: Delivering Competitive Advantage for Your Organization.* Philadelphia: Kogan Page.

In this text, the authors emphasize the importance of reframing the discussion of training and development to a discussion of *learning* and development. The text includes an overview of adult education that covers learning styles and motivation. The most significant portion of the text discusses over twenty learning methods that anyone interested in the workplace learning will recognize such as action learning, distance learning and e-learning. These methods are examined in a series of seven case studies. Clifford and Thorpe have both contributed to the field of workplace learning for almost four decades.

Garvin, David A. 2000. *Learning in Action: A Guide to Putting the Learning Organization to Work.*Boston, MA: Harvard Business School Press.

Most managers today understand the value of building a learning organization. Their goal is to leverage knowledge and make it a key corporate asset, yet they remain uncertain about how best to get started. What they lack are guidelines and tools that transform abstract theory - the learning organization as an ideal - into hands-on implementation. For the first time in "Learning in Action", David Garvin helps managers make the leap from theory to proven practice. Garvin argues that at the heart of organizational learning lies a set of processes that can be designed, deployed, and led. He starts by describing the basic steps in every learning process-acquiring, interpreting, and applying knowledge-then examines the critical challenges facing managers at each of these stages and the various ways the challenges can be met. Drawing on decades of scholarship and a wealth of examples from a

wide range of fields, Garvin next introduces three modes of learning - intelligence gathering, experience, and experimentation - and shows how each mode is most effectively deployed. These approaches are brought to life in complete, richly detailed case studies of learning in action at organizations such as Xerox, L. L. Bean, the U. S. Army, and GE. The book concludes with a discussion of the leadership role that senior executives must play to make learning a day-to-day reality in their organizations. (Abstract from author)

McLagan, Patricia. 1989. The Models, vol. 3 in Models for HRD Practice. Alexandria, VA: ASTD Press.

McNeil, Rita C. 2012. Leveraging the Power of Diversity in Workplace Learning Strategies. *Handbook of Research on Workforce Diversity in a Global Society: Technologies and Concepts,* (pp. 225-243). Hershey, PA: IGI Global.

Just as adult learning strategies can be categorized into three major learning strategy preference groups (Conti & Kolody, 1998), workplace learning events can also be similarly categorized into a spectrum containing three major clusters: (a) the Navigation Cluster, containing those tasks that require planning, organizing, and structuring of content; (b) the Problem-Solving Cluster, containing those tasks that require innovative creativity or critical thinking skills; and (c) the Engagement Cluster, containing those tasks that require interand intra-personal skills required when working in situations that involve others. The purpose of this chapter is to propose an emerging 4-step framework that can be used to guide individuals, educators, and workplace trainers through a process to assist learners in identifying their learning strategies preferences and in leveraging these individual metacognitive processes in order to achieve specific workplace learning objectives.

Noe, Raymond. 2009. Employee Training & Development, 5th ed. New York: McGraw-Hill/Irwin.

Now in its fifth edition, Noe's publication has served as the classroom primer for training for over 10 years. The text explains fundamentals such as training design, methodology, assessment and evaluation. Noe also discusses the role of traditional training alongside newer developments that integrate various technologies. Along with outlining the newest training research, Noe further compares this research with current workplace practices. This text is generally used as a classroom textbook, but can be of value to any trainer who is learning both the theoretical and practice aspect of modern training.

Stolovitch, Harold, and Erica Keeps. 2005. *Beyond Telling Ain't Training Fieldbook*. Alexandria, VA: ASTD Press.

Human performance, although a field in itself, is often closely associated with the study of workplace learning. In *Beyond Telling*, the third book in a series of related titles that include *Telling Ain't Training* (2002) and *Training Ain't Performance* (2004), Stolovitch and Keeps give trainers practical tools on how to move their organizations from training to performance. Each chapter illustrates "learning interventions" meant to assist trainers in

overcoming organizational obstacles. *Beyond Telling* builds upon the first book in the series which discusses the theory and principles behind learning and training yet written in an entertaining and relaxed manner for both the novice and experienced trainer. The second publication explores in-depth how training and performance are related.

Wenger, E., R. McDermott, and W.M. Snyder. 2002. *Cultivating Communities of Practice.* Boston, MA: Harvard Business School Press.

The authors begin by addressing what communities of practice are and why they are important. They then move into the art of community development, the special case of distributed communities, and potential downsides of communities. The final chapters cover the challenges of measurement and management, how to run a company-wide knowledge initiative, and the broader potential for communities in society in general.

<u>Journal Literature</u>

Austin, Michael J. 2008. "Strategies for Transforming Human Service Organizations into Learning Organizations: Knowledge Management and Transfer of Learning." *Journal of Evidence-Based Social Work* 5(3-4): 569-596

To meet the challenges of today's human service industry, agencies need to balance effectiveness, efficiency, and innovation, while engaging in inter-disciplinary, culturally competent, and self-reflective practice. This analysis presents the major elements in developing strategies for transforming organisations into learning organisations. It starts by describing the nature of a learning organisation, defines the boundaries of evidence-informed practice, identifies the elements of knowledge management, and specifies the elements of the transfer of learning. A set of principles are presented to guide managers in transforming human service organisations into learning organisations along with a set of implementation strategies that can inform participants of the values and benefits of knowledge management. This analysis features concepts and principles adapted and synthesised from research in diverse fields, such as evidence-based health care and the forprofit sector related to learning organisations, knowledge management, and the transfer of learning. (Journal abstract)

Dolezalek, Holly. 2006. "Who has time to design?" *Training* 43(1):24-28.

An important aspect of workplace learning is training delivery. With the time constraints faced by most corporate trainers, Dolezalek discusses how content has become much more of a focus than the equally important delivery of that content. Experts in the field comment on the various elements of instructional design, and the author provides a list of helpful resources to aid trainers in learning how to design training as well as groups where trainers can communicate with one another on this topic. (Note: the new URL for the IEE's *Reference Guide for Instructional Design and Development* is now at:

http://www.ieee.org/education_careers/education/reference_guide/index.html.) Dolezalek has written extensively for *Training* in the areas of workplace learning.

Lewis, Nancy J. 2011. "Soapbox: Informal Learning: Style vs. Substance". *Training* 48(1):18-20. Retrieved from http://www.trainingmag.com/content/soapbox-informal-learning-style-vs-substance.

This short article focuses on technology-based informal learning and the gaps that currently prevent it from becoming an effective tool.

Margaryan, Anoush, Colin Milligan, and Allison Littlejohn. 2013. "Managers as Workplace Learning Facilitators". *Human Resources: Development and Management* 2-3(13):206-223.

This exploratory, interview–based study (n = 29) elicits activities carried out by managers in support of employees' learning and surfaces similarities and differences in the ways these activities are perceived by novice, experienced and mid–career workers. Analysis suggests that managers provide a wide variety of types of learning support, ranging from hands–on support on operational issues, structuring individual development programmes and advice on learning opportunities, to coaching, career advice, counselling and being a role model. The perceptions of novice, experienced and mid–career professionals are compared and contrasted, tentative patterns identified and a typology of managers' learning facilitation activities proposed. The results suggest that to enable managers to facilitate workplace learning effectively, a broader range of competences and skills should be considered when training managers. [Journal Abstract]

Russ-Eft, Darlene. 2002. "A Typology of Training Design and Work Environment Factors Affecting Workplace Learning and Transfer." *Human Resource Development Review* 1(March): 45-65.

The purpose of this article is to develop a typology of elements involved in the design of training as well as in the work environment that affect workplace learning and transfer. This typology focuses on elements that can be manipulated by the human resource development (HRD) researcher and practitioner as part of the HRD implementation rather than on dispositional and personality characteristics of individuals participating in the intervention. It identifies elements within the work environment, as well as elements before, during, and after training. By presenting a typology, this article provides a first step in theory building or a "theory of the middle range." Furthermore, it leads to implications for future theoretical development, research, and practice. (Journal abstract)

Schugurensky, Daniel. 2000. The Forms of Informal Learning: Towards a Conceptualization of the Field (WALL Working Paper No. 19, 2000). Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf.

This working paper focuses on the three forms of informal learning: self-directed, incidental and socialization.

Simon, Mark. 2010. "Maintenance: The Forgotten Step" *T+D* 64(5):48-51.

In most of the popular approaches to developing training the element of maintenance is often not addressed. Author Mark Simon discusses the importance of not only maintaining training after an initial program but also developing training that requires minimal ongoing maintenance. The author offers a few constructive techniques for developing training with maintenance in mind such as indexing topics that occur throughout multiple trainings for ease in updating and avoiding vocabulary and references that will soon be dated. Simon is a corporate trainer who has been involved with training development for over 20 years. (Full article available at: http://www.astd.org/Publications/Newsletters/Learning-Circuits-Archives/2010/02/Maintenance-the-Forgotten-Step)

Van Dam, Nick. 2012. "Designing Learning for a 21st Century Workforce." *T+D Magazine* (April): 49-53.

The author describes how a blend of formal and informal learning strategies can be turned into "a learning framework that provides a holistic perspective on how organizations can build people capabilities and design leading learning experiences". pg. 49.

Walden, Patrick R., Valerie C. Bryan, and Sunil Ramlall. 2011. "Informal learning in the workplace: a comparison of two models." *International Journal of Human Resources Development & Management* 11(1): 1-15.

This article introduced Walden's process model of informal workplace learning (Walden, 2008) and compared this model to that reported by Cseh et al. (1999). Secondarily, this article proposed suggestions for technology-enhanced effective informal workplace learning practices. Differences between the two models were described. It was found that Walden's model lent empirical support to Cseh, Watkins and Marsick's model. Walden's model lacked an examination of multiple alternative solutions to identified problems and a framing/re-framing of business contexts after learning, both of which were part of Cseh, Watkins and Marsick's model. Walden's model did, however, add a step for implementation of action based on learning in the workplace as well as a time frame with which learners engaged in informal learning strategy use. These two additions were not included in Cseh, Watkins and Marsick's model. (Journal abstract)

Willmore, Joe. 2002. "How to Give 'Em Performance When They Insist on Training." *T+D* 56(5):54-59.

Trainers often cite examples of employers' requests that they conduct a specific training without having considered the performance outcomes the training is meant to address.

Willmore emphasizes the importance of appropriate training that is also designed to meet performance needs. The responsibility of the trainer is to convey the importance of analyzing the need which in turn should shape training. Willmore offers ways to influence these considerations and to position oneself to be able to develop responsive training. Joe Willmore is a consultant in the field workplace learning and human performance improvement.

How has workplace learning been implemented?

Online Readings and Resources

"Case Studies TELUS: Telecom Company Embraces Social Computing, Streamlines Formal Learning." 2010.

http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?CaseStudyID=4000006924, accessed September 7, 2010.

Much of the tension in current discussions of workplace learning concerns the place of Learning Management Systems (LMS). This article gives an over of TELUS, a telecommunications company that adopted the Microsoft product SharePoint to develop and explore new technologies in their workplace learning efforts. Although any innovative software could easily replace SharePoint or a combination of various software and applications, the article is illustrative of how a company can utilize a piece of software in aiding and enhancing their training efforts instead of hindering them.

Chao, Chia-an, and Yin Roger Li-chung. 2003. "From Workplace Learning to Knowledge Management: Implications for Organizational Advancement." Refereed presentation at the 22nd Annual Research Conference Organizational Systems Research Association, Las Vegas, http://www.osra.org/2003/chao.pdf, accessed September 7, 2010.

Knowledge management is generally accepted as one of the ways organizations stay competitive. The problem that is often encountered is in mining the knowledge that has been acquired by workers and effectively managing that information. This study discusses how knowledge is created, gained and shared among recently hired consultants. Chao and Li-chung found that consultants would recognize a lack of skill in a particular area and initiate ways in which to fill that gap. They would also gain knowledge simply from completing a challenging project or assignment. Projects also produced knowledge deliverables that could be later utilized by other consultants. The authors' recommendations include observing and documenting how knowledge is created and transferred in an organization for it to be able to effectively respond to the learning needs of the workplace.

Top 10 Articles of 2013 | Training Outsourcing | Training Industry. (n.d.). Retrieved January 8, 2014, from http://www.trainingindustry.com/training-outsourcing/articles/top-10-articles-of-2013.aspx

This online article provides a list of the Top 10 articles of 2013 from TrainingIndustry.com and from Training Industry magazine.

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. 2010. Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. Retrieved from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf.

A systematic search of the research literature from 1996 through July 2008 identified more than a thousand empirical studies of online learning. Analysts screened these studies to find those that (a) contrasted an online to a face-to-face condition, (b) measured student learning outcomes, (c) used a rigorous research design, and (d) provided adequate information to calculate an effect size. As a result of this screening, 50 independent effects were identified that could be subjected to meta-analysis. The meta-analysis found that, on average, students in online learning conditions performed modestly better than those receiving face-to-face instruction. The difference between student outcomes for online and face-to-face classes—measured as the difference between treatment and control means, divided by the pooled standard deviation—was larger in those studies contrasting conditions that blended elements of online and face-to-face instruction with conditions taught entirely face-to-face. Analysts noted that these blended conditions often included additional learning time and instructional elements not received by students in control conditions. This finding suggests that the positive effects associated with blended learning should not be attributed to the media, per se. An unexpected finding was the small number of rigorous published studies contrasting online and face-to-face learning conditions for K-12 students. In light of this small corpus, caution is required in generalizing to the K-12 population because the results are derived for the most part from studies in other settings (e.g., medical training, higher education). (Abstract from author)

Books

Brinkerhoff, Robert O. 2006. *Telling Training's Story: Evaluation Made Simple, Credible, and Effective.*San Francisco: Berrett-Koehler.

In this text the author describes the evaluation tool Success Case Management (SCM) which is meant to be used to show stakeholders as well as trainers that training is being effective. The author uses the first half of the text to outline SCM in five steps which can be summarized in two steps: document the most and least successful trainees and analyze the results they have or have not achieved. The second half of the text illustrates successful implementation at companies that should be familiar to most people such as Compaq, Coffee Bean and AllState. Brinkerhoff has worked with national and international companies on training evaluation and is the author of numerous books on this topic including this text's companion title *The Success Case Method: Find Out Quickly What's Working and What's Not.*

Broad, Mary L. and Jack J. Phillips (eds.). 1997. *In Action: Transferring Learning to the Workplace.* Alexandria, VA: ASTD Press.

Transfer of learning is an educational concept that continues to be reconsidered as additional new research become available, but no matter the viewpoint, the ability of workers to translate learning to performance continues to be important issue in workplace learning. In this text, Broad takes 17 case examples of successful transfer from various industries. After an introductory overview of the concept of transfer and applicable research (which should be noted will be somewhat dated due to the date of publication), the studies are divided into two sections, individual performance and performance by groups and organizations and also range from difficult to complex scenarios. Both editors are experts in workplace and human resource development

Evans, Karen, Phil Hodkinson, Helen Rainbird and Lorna Unwin. 2006. *Improving Workplace Learning*. New York: Routledge.

Through five research projects set in a variety of workplaces, the authors explored various concepts of workplace learning including situated learning, communities of practice, apprenticeship, informal learning and tacit skills. As per the authors, the text is intended to serve as a resource for practitioners who can put the ideas of the text into action. The book covers topics such as expansive and restrictive learning environments, learner biographies and worker influences on the workplace. The last two chapters discuss policy implications and include an extensive section on how policy can influence workplace learning illustrated by the case studies from the authors' research. The authors, Evans, Hodkinson, Rainbird and Unwin are researchers in the field of workplace learning and hold various teaching positions.

Fuller, Alison, Anne Munro and Helen Rainbird (eds.). 2004. *Workplace Learning in Context.* New York: Routledge.

In this collection of articles, the editors give perspective to workplace learning through a selection of case studies. As explained the preface, the case studies "illuminate how the workplace environment can provide both barriers to and opportunities for learning." Articles discuss such topics as workplace power relations, the organization of work, learner biographies and measuring learning. Because some workplace studies are specific to the political and social structure of a particular county, their usefulness may not be apparently useful but each article exposes the reader to different perspective they may not have considered previously. The editors, Fuller, Munro and are researchers in the field of workplace learning and hold various teaching and research positions.

Kirkpatrick, Donald L. and James D. Kirkpatrick. 2005. *Transferring Learning to Behavior: Using the Four Levels to Improve Performance.* San Francisco: Berrett-Koehler.

Donald Kirkpatrick's four-level evaluation method – reaction, learning, behavior, results – is one of most highly used in corporate America such as Toyota and Nextel. This text focuses on the third and fourth levels: bridging the gap between learning and performance which

must occur for the result to be analyzed and promoted within the organization. The author examines the reasons why learning is not translated into practice and practical solutions that can be implemented. The advice offered in the text is illustrated with best-practices that are embraced by 12 companies including well-know names such as Hewlett Packard and Blue Cross and Blue Shield.

Rothwell, William, Ethan Sanders, and Jeffrey Soper. 1999. *ASTD Models for Workplace Learning and Performance: Roles, Competencies, and Outputs.* Alexandria, VA: ASTD Press.

Based on research data collected in the last decade, this resource describes the 52 competencies identified for success in workplace learning and performance. A CD-ROM lets you benchmark your skills in all 52 competencies against more than 1,000 WLP professionals. (Abstract from publisher)

Wick, Calhoun W., Roy V. H. Pollock and Andy Jefferson. 2010. *The Six Disciplines of Breakthrough Learning: How to Turn Training and Development into Business Results*, 2nd ed. San Francisco: Pfeiffer.

Now in its second edition, *The Six Disciplines* has received accolades from companies such as Agilent Technologies to think tanks such as The Center for Creative Leadership. The "6 Ds" include: (1) Define business outcomes, (2) Design the complete experience, (3) Deliver for application, (4) Drive learning transfer, (5) Deploy performance support, and (6) Document results. Each of these sections is backed by current research, manger insights and a variety of case studies including Fortune 500 companies. Authors Wick, Jefferson and Pollack are the founder, CEO and CLO, respectively, of a well-respected workplace consulting company.

Journal Literature

Bjomberg, Linda. 2002. "Training and Development: Best Practices." *Public Personnel Management* 31(4):507-517.

This report published by the International Public Management Association for Human Resources (IPMA HR) identifies best practices in the field of human resource management including a section on training and development. This section identifies four areas of training evaluation that when highly developed qualify as best practices. Two organizations' best practices are illustrated: Boward County, Florida and Hennepin County, Minnesota. Highlights are given as well as how these practices align strategically with the overall organization, the structure and function of their training efforts and how these practices are assessed and transferred at work. The report also includes the sections: "The Way We Learn, Assessing the Training Needs of High Potential Managers," "Examining Training in Large Municipalities" and "Training Needs Assessment."

Fuller, Alison, Lorna Unwin, Alan Felstead, Nick Jewson, and Konstantinos Kakavelakis. 2007. "Creating and Using Knowledge: An Analysis of the Differentiated Nature of Workplace Learning Environments." *British Educational Research Journal* 33(5):743-759.

One of the tenants of workplace learning is that learning is not restricted to a classroom environment, a key concept that Fuller et al. argue through three case examples. The authors support this idea and expand upon the notion that learning happens in many more ways of which organizations are aware. Expansive and restrictive workplace environments are contrasted in both the text and chart. Although the case studies are based on organizations in the United Kingdom, part of continuing work of the University of London's Institute of Education, their application can be assume to be widely applied. (Full article available at: http://eprints.ioe.ac.uk/2351/)

Ha, Tak S. 2008. "How IT Workers Learn In the Workplace." *Studies in Continuing Education* 30(2):129-143.

This study focuses on the workplace learning, both formal and informal, of a group of IT professionals from three Hong Kong companies. The four methods explored by the author include: "instructor-led training; on-the-job training; learning through work; and self-learning." The report also discusses how the employees came to learn a specific skill, how communities of practices operated in these organizations, and how useful gaining theoretical knowledge while at work is to employees. Ha found that each workplace had an abundance of resources to facilitate learning and that workers embraced the idea that ongoing learning is part of the work experience. (Full article available at: http://www.tandfonline.com/doi/abs/10.1080/01580370802097728?journalCode=csce20)

Hodkinsona, Phil, and Heather Hodkinsona . 2004. "The Significance of Individuals' Dispositions in Workplace Learning: A Case Study of Two Teachers." *Journal of Education and Work* 17(2):167-182.

In this article, the authors explore how an individual's identity and past experiences not only contribute to how and why they learn in the workplace but also how the workplace contributes to the formation of their identity. The findings on identity and workplace were based on research involving adult learners who were shadowed upon their return to work. The authors conclude the article by summarizing why most theories of workplace learning will at best have uneven results because of the inability to control for the personality and traits of each individual. This paper was the result of a project by the Teaching and Learning Research Programme at the Institute of Education at the University of London. (Full article available at: http://www.tandfonline.com/doi/abs/10.1080/13639080410001677383)

Hofmann, Jennifer and Nanette Miner. 2008. "Real Blended Learning Stands Up: Moving beyond mixed offerings to build the best blended learning." *T+D Magazine* (September):28-31.

The article discusses the significance of blended learning on developing professionals in the U.S. Accordingly, the typical definition of blended learning requires that participants do some prereading prior to attending a class, attend a live class, and participate in an on-the-job assignment. Blended learning includes a variety of learning methods, from self-study materials such as job aids and books, to field trips and simulations, or on-the-job experiences with a mentor or a coach. One of the best blended learning offerings involved a large online business that offered off-the-shelf leadership development classes. (Journal abstract)

Holton, E.F., R.A. Swanson and S. Naquin. 2001. "Andragogy in Practice: Clarifying the Andragogical Model of Adult Learning." *Performance Improvement Quarterly* 14(1):118-143. Retrieved from http://richardswanson.com/publications/Swanson(2001)Androgogyinpr.pdf.

The andragogical model has stood for many years as a central model of adult learning. The purpose of this article is to offer a fresh look at certain aspects of andragogy that are important for performance improvement professionals as well as other adult educators. More specifically, the objectives are to clarify the current state of the andragogical principles, address certain key issues in using andragogy in practice, and offer a clearer framework for adapting andragogy to different practice conditions. An expended model, Andragogy in Practice, is offered that more explicitly accounts for factors that must be considered in shaping andragogy to fit the learning situation. (Journal abstract)

Powers, Vicki. 2004. "Virtual Communities at Caterpillar Foster Knowledge Sharing." *T+D* 58(6):40-45.

Beginning as a small, local initiative to increase knowledge sharing among workers, Caterpillar's Knowledge Network has reached employees and dealers worldwide. Their "Knowledge Network" is a web-based program that lets members post questions, answers and reference materials that are reviewed by a moderator for accuracy. Various "communities of practice," those interested in a specific area of the company's work, have utilized the systems to distribute information that often did not reach its intended audience and those with related interests. The initiative soon evolved into the Caterpillar University with knowledge sharing and the Knowledge Network as its base.

Stroud, Dean, and Peter Fairbrother. 2008. "The Importance of Workplace Learning for Trade Unions: A Study of the Steel Industry. *Studies in Continuing Education* 30(3):231-245.

In this article, Stroud and Fairbrother explore the ways in which unions contribute to the workplace learning experiences of their members which influences their employability. The authors point out that unions have historically been vested in their members' learning opportunities to both maintain and increase their skill set but also to improve workplace inequities. In the study of European steel workers, workplace learning has been significantly influenced by industry restructuring. Organizations have mostly adopted

regressive learning practices, simply filling skill gaps, as opposed to progressive learning practices that consider overall organization and associated learning needs. Unions have yet to significantly influence adoption of the former, yet their support for change seems a natural fit because of the beneficial outcomes for their members. (Full article available at: http://www.tandfonline.com/doi/abs/10.1080/01580370802439920)

Zhao, Fang and Linzi Kemp. 2013. Exploring Individual, Social and Organisational Effects on Web 2.0-based Workplace Learning: A Research Agenda for a Systematic Approach. *Research in Learning Technology* (21).

Web 2.0-based workplace learning is defined in this article as informal learning that takes place in the workplace through connections and collaborations mediated by Web 2.0 technology. Web 2.0-based workplace learning has the potential to enhance organisational learning and development. However, little systematic research has been published that explores how individual, social and organisational factors may influence Web 2.0-based workplace learning. This study aims to address this knowledge gap. Drawing on a selective review of the theories and research on social exchange, social capital, communities of practice and organisational support, we have developed a testable theoretical model for further empirical study. [Journal Abstract]