

MULTIPLE MODES IN CORPORATE LEARNING: PROPELLING BUSINESS IQ WITH FORMAL, INFORMAL AND SOCIAL LEARNING

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ABSTRACT

Recognizing that the shifting corporate environment is placing ever greater stresses on learning organizations, this paper reports how companies are increasingly offering employees a wide choice of learning options beyond conventional classroom training, including online, social learning, and other modalities in “blended” programs. Identifying a number of trends—a multi-generational workforce, remote employees, off-shoring and contract workers, and talent management requirements—that are contributing to the changing corporate human capital landscape, the authors suggest that these changes are transforming the learning enterprise, placing learners at the center and altering the learning mix with the introduction of web-based and other technologies. Outlining a taxonomy of corporate learning, the authors divide the training enterprise into formal, informal, and social learning modalities. Under formal learning, they identify pre-work, groupwork, and post-work as principal elements. The paper concludes with a call for companies to deliver a comprehensive, multi-modal learning portfolio that cost-effectively satisfies a wide range of employee and corporate needs.

KEYWORDS

Off-Shoring, Contract Workers, eLearning, Corporate Training, Remote Workers, Talent Management, Multi-generational Workforce, Formal Learning, Informal Learning, Social Learning

I. INTRODUCTION

Today, companies struggle to address the complex and constantly changing learning and performance needs of their employees. Driven by shifts in the available talent pool, the marketplace, and the competitive landscape, skills and knowledge needed by a typical enterprise emerge as vast and continually changing. How can a learning organization keep pace within budgetary and resource constraints and succeed?

An important part of the answer lies in creating and maintaining a vibrant, expanding and constantly evolving repository of multiple learning options. While many have focused almost solely on the introduction of robust learning technologies to satisfy demand, challenges in providing effective content have been largely overlooked. As a result, many companies offer less than optimal content in terms of cost, time-to-market and quality. By grasping the complexity of the content challenge, executives who take a “supply-chain” approach, discover that it is possible to keep pace with corporate learning needs and provide measurable business value as well. The supply chain-model is useful in aligning the amount of effort, time and cost that should be applied to a particular piece of content, in relation to the value it provides to the enterprise. This further drives the thinking about how to acquire an “inventory” of content “products” that can be efficiently and economically sourced to meet the myriad formal, informal and social learning needs in today’s typical enterprise.

II. GROWING APPETITE FOR ALTERNATIVE CONTENT OPTIONS

In the heyday of the dot-com boom, some believed that the Internet, with millions of freely available pages, would satisfy corporate hunger for learning content, with the training function itself destined for extinction. Instead, the Internet has exacerbated the challenge by drowning employees in content of dubious veracity and relevance. While the Internet is widely recognized as an important business tool, it also creates a costly drag on productivity as employees spend ever greater amounts of their time searching for the needle of accurate and useful information buried in the haystack of Internet facts and figures [1]. By maintaining a curated inventory of trusted learning content on a wide variety of subjects, organizations can address many informal learning needs without the risk or productivity loss associated with Internet searching.

The recent economic downturn has sharpened the focus of corporate training organizations, with learning executives now finding that they are in a much better position to align training with business strategy and deliver greater value to their companies [2]. As corporations look for less costly and more scalable ways to satisfy globally diverse workforces, executives are increasingly adopting alternate learning modes [3].

III. TRENDS DRIVING MODULAR CONTENT

In fact, there are a number of macro-trends contributing to a growing appetite for new approaches to learning and performance support.

A. Multi-generational Workforce

Today's workplace is shared by four generations. While all age groups value learning, preferences vary considerably. Typically, older workers prefer more structured, face-to-face learning experiences, while newer entrants into the workforce, who have grown up with computer-aided learning and video games, largely prefer to learn by doing, commonly in front of computer screens [4]. Learning professionals must learn how to bridge differences in these populations with a wide variety of learning options.

B. Remote Workers

Today's workplace is now more widely dispersed than ever. In virtually every industry, the number of workers in remote offices has increased dramatically. Thanks to technologies that easily track workforce activities remotely, even employees who have been traditionally located at central facilities, can now be housed in far-flung branch or home offices [5]. Remote workers, however, often suffer from limited access to information as well as circumscribed informal and social learning opportunities, constraints that can negatively impact performance and lead to a sense of isolation. A variety of online social platforms are emerging that might begin to alleviate this sense of isolation.

C. Off-Shoring and Contract Workers

Off-shore hiring has allowed companies to expand their workforce at lower cost, but it requires greater management and training attention [6]. Engaging contractors is yet another way to expand workforce capacity, but companies must ensure that they provide the same level of service as in-house employees receive, a task often requiring additional training programs.

D. Talent Management

Another factor driving demand for corporate learning is the emergence of talent management as an important business strategy. Inevitably, as companies adopt more workforce management automation and discipline, the need for many different modes of learning follows. In fact, some argue that learning and skills development is the single most important capability for companies today [7].

At its core, talent management is about defining job roles and the competencies that comprise them. In turn, competencies are composed of measurable behaviors. As companies define roles more precisely, they become better able to measure how well workers track against them. As a consequence, companies

more easily discover where skill gaps may exist. Talent management lays the groundwork for a more efficient and effective way to align learning with the needs of specific workers. When learning can be “surgically” applied to the needs of individuals in given roles, its effectiveness and business value can be more precisely measured.

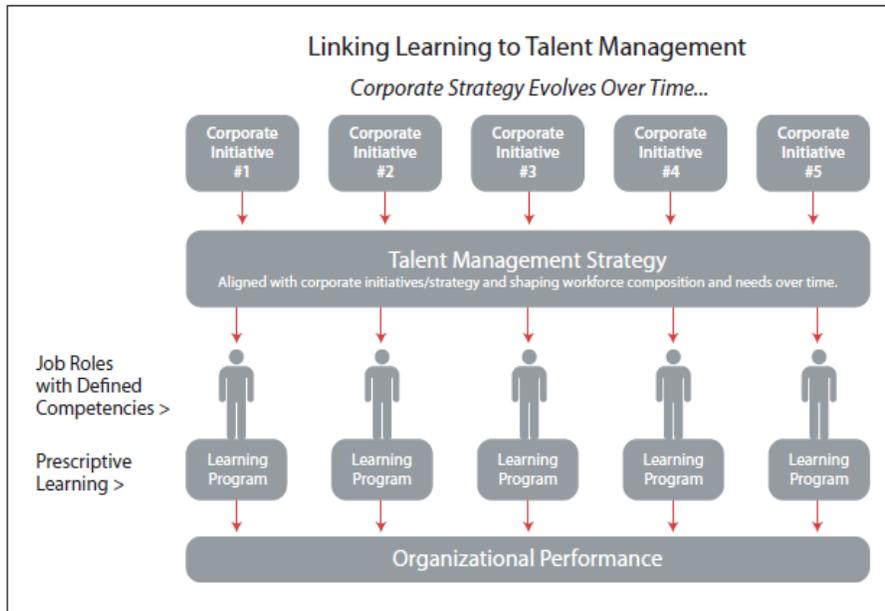


Figure 1: Alignment of learning with job roles and competencies

While obviously an advantage, nonetheless, when large numbers of job roles are multiplied by dozens of competencies, the need for learning assets of various kinds also multiplies significantly. Suddenly, a company may find that in order to support its talent management initiatives successfully, it must have ready-access to thousands of learning assets in a wide variety of forms, a consequence that is driving the need for more online learning with more a modular approach to introducing content.

When the economic picture darkened in 2008, it seemed reasonable to expect that it would dampen corporate enthusiasm for talent management. After all, much of the early talent management interest was formed by the predication that large numbers of retiring baby boomers would lead to significant worker shortages. Instead, the economic downturn caused many older workers to postpone retirement, but the zest for talent management and the concomitant need for organizational learning did not cool as much as some experts expected.

The notion of a looming worker shortage was founded on an oversimplified view of the workforce. There are many ways that companies can compensate for the loss of particular segments of the labor pool. One option is to fill the gap with plentiful and lower-priced talent abroad. Another is to adopt targeted labor-saving technologies [8]. However, both options come with a significant learning “tail.” Overseas workers often require training in basic business skills and new technologies deliver value only when workers are trained on how to use them effectively.

What is most significant is that, even in the midst of what has been called one of the worst economic periods since the Great Depression, nonetheless, many companies were experiencing difficulty in hiring skilled workers in areas such as IT. The US Bureau of Labor and Statistics reports, for example, that employment in one IT job classification, “networks, systems and database administrators,” is expected to grow by 30% by 2018 [10], a predication for just one segment of IT experiencing double-digit growth. As demand outpaces supply in a number of job categories, many companies have concluded that it is

prudent to introduce a multi-pronged approach to sourcing employees in high-demand fields. Obviously, internal development is one of the more productive options for filling critical skill positions, creating additional needs for specific learning content.

E. Accelerating Change

Driven by the accelerating pace of change in new technology, global competition, and other dynamic forces, industry has had to become far more agile and efficient. Since the economic downturn, many companies have been forced to proceed with a smaller workforce, performing equal or greater amounts of work. To compete successfully, organizations must cultivate a flexible, highly skilled, and innovative workforce. Ironically, innovation, new ways of managing, and new technologies all require new skills—often the very skills in short supply. Consequently, a corporate learning culture has now become a necessary part of building and sustaining agile business [10].

F. Corporate Learning Culture

In a relatively short time, the training function has evolved from being a provider of relatively straightforward instruction on a limited set of topics, to becoming a curator of a learning ecosystem that supports a wide range of learning needs, including formal, informal and social [11]. Companies now expect the learning organization to offer a broad mix of modalities and new technologies, with new skills required of learning professionals themselves.

G. Learners at the Center

Learners are at the center of the new ecosystem. Not only do workers expect to receive learning tailored to their specific needs and schedules, they also expect to be active participants—collaborating with colleagues and contributing their own specialized knowledge to the organization. “One-size-fits-all” learning is dead. Modular learning, delivered when and where the learner specifies, is the new goal.

Last Decade	Next Decade
from formal and informal	to formal, informal and social
from learning basics	to learning amplification
from big chunks	to small chunks
from one-shot learning	to constant adaptation
from curriculum	to learning environment
from user as learner	to user as learner and expert
from what employers want	to what practitioners need

Figure 2: Evolution of learning Original SkillSoft Assessment (2010) partially derived from Jordan [12]

H. Learning Mix

At most corporations, new expectations have generated a significant change in learning options. In 2001, 76% of training was delivered in the instructor-led, real-time classrooms, with merely 11% technology-based. By 2007, the percentage of instructor-led training had declined to 61%, while technology-based learning had tripled to 33%. Interestingly, in 2008 instructor-led training rebounded slightly to 63%. ASTD credits the shift to the economic downturn, with the observation that companies may have delayed new investment in e-learning because of high up-front costs. ASTD expects growth in e-learning to return to previous trends in 2009 [13].

Clearly, classroom instruction is still an important part of most corporate learning programs. Today's learning professionals are becoming adept at exploiting face-to-face instruction only when it is most critical. Because of its inherent cost and logistical inflexibility, classroom training is now selected by many learning professionals as the mode of last resort, when other forms cannot do the job effectively [14].

I. Learning Technology

The technology landscape has also changed significantly. In many large companies, learning management systems are now ubiquitous and have even become more commonplace at smaller companies as well. While learning platforms are now required by most organizations to deliver and track training, the role of these systems is also changing. Once primarily a tool for managing classroom learning and resources, today learning systems often function behind-the-scenes, emerging as engines for syndicating multi-modal content to a variety of environments. IBM, for example, calls the new distribution mode "work-embedded" learning. With employees expecting learning tailored to their unique needs, companies now place a premium on flexibility and integration with other systems.

J. Learning Professionals

Changes in workplace expectations have fueled the need for a new kind of learning professional, an executive with deep expertise far beyond pedagogy alone. Today's learning professional must not only master the complexities of learning platforms, but must closely follow the latest trends in Web 2.0 technologies that are reshaping employee practices. Gone are the days of simply satisfying compliance and basic training (although these demands have not gone away but, in fact, have mushroomed in an increasingly regulated environment). In order to survive, today's learning professional must be a multi-tasker, with multi-modal job skills.

IV. FORMAL, INFORMAL AND SOCIAL LEARNING

While much has changed in corporate learning, many things have remained the same. Today, there are several distinct learning programs, each with its own sets of goals.

A. Formal Learning

To continue to build workforce skills and ensure compliance with government regulations, companies must maintain a strong base in formal learning. At most organizations, formal learning occupies the largest share of the training budget, even though some feel that formal learning accounts for a relatively small percentage of learning workers engage in. Because formal learning carries the primary mission and represents the greatest expenditure at most organizations, it is critical that it be efficient and effective, especially when worker productivity is essential for the bottom line.

Formal learning is distinguished from other forms in that it is structured, planned and measured. Today's formal learning programs are often made up of multiple learning modalities presented as a "blended" learning program. It is a cost-effective, timely way to deliver learning to meet learning goals and speed "time-to-competency," often the primary measure of learning's effectiveness [15]. Blended programs often take these forms:

Pre-work: In pre-work, content may include books, articles, videos or online courses with basic cognitive knowledge required for each topic. When delivered through a learning management system, pre-work can be tracked to ensure that employees complete their assignments, arriving at the next phase fully prepared.

Groupwork: Physical or virtual, the classroom is still the centerpiece of many learning programs. When employees are able to complete pre-work assignments to achieve a standard level of knowledge before class begins, the instructor is able to move into discussion and exercises more quickly. The value of the classroom is increased substantially by the introduction of other modalities beforehand and afterwards.

Post-work: To ensure that newly acquired skills become part of daily work life, post-work aims to reinforce key concepts following centerpiece learning events. Content, such as short videos, simulations, additional readings or courses remind the learner to implement new ideas and behaviors. The role of managers is very important in reinforcing skills and in supporting staff. Outcomes are significantly improved when managers help employees appreciate how their new knowledge fits within the larger framework of the organization and how their newly acquired learning can propel their careers [16]. Today, formal learning programs are also increasingly reinforced by social learning, communities of practice and experiential learning techniques.

B. Informal Learning

According to a number of studies, informal learning represents about 70-80 percent of worker knowledge acquisition [17]. While few dispute these findings, many learning professionals are unsure how to support it. The very nature of informal learning—impromptu, highly variable, and short in duration—makes it difficult to manage systematically. Because the Internet has taught people how to find answers to their questions by entering queries in search engines such as Google, a prudent informal learning strategy exploits employee comfort with Internet applications. With a robust search capability, employees can locate information by searching internal knowledge-bases and other collections of learning content [digital books, articles, videos and other concise learning modules).

Informal learning initiatives are often designed to complement formal learning or to provide ongoing performance support when formal learning has ended. Many learning professionals report that executives and experienced employees often eschew formal training and prefer to develop new knowledge and skills through informal methods. For experienced professionals, informal learning is often more important in day-to-day performance than formal training.

Because some organizations are new to informal learning, they may temper their investment in it because it is difficult, if not impossible, to measure its return on investment. How can any system be expected to capture the value of an “ah ha!” moment that occurs as a result of a serendipitously discovered piece of information? As Albert Einstein famously put it, not all things that can be measured are of value, and not all things of value can be measured. Organizations that have embraced informal learning take this wisdom seriously, accepting that there is value in it, even though their ability to demonstrate concrete ROI is limited.

V. SOCIAL LEARNING

Social networks, such as Twitter, Facebook, and LinkedIn are exerting a profound impact on our way of life. These sites provide a *platform* for collaboration, not merely a *channel* for collaboration. The differences are stark. In his book, *Enterprise 2.0*, MIT’s Andrew McAfee distinguishes the two very nicely [18]. *Channels* for collaboration have been around for a long time:

telephone—easy, convenient, personal; conference call—groups of people talking together in a single, synchronous event, as in a classroom; email—the greatest collaboration tool of the past quarter century; mobile phone texting and IM—quick and convenient. All are what McAfee calls *channels*.

The problem with these channels is that, with few exceptions, they essentially keep communication private. They trap knowledge and communication in invisible, inaccessible and unsearchable technologies. They leave no residual trace of the collaborative dialogue.

An alternative to a *Channel* is a *Platform*. *Platforms*, says McAfee, are collections of digital content in which contributions are globally visible (anyone who is part of the community can see them) and persistent (they stick around and can be discovered, searched, or shared). Access to platforms can be restricted, but the main goal of a platform is to make content permanently and widely available to the community it is serving. Social media “amplifies” content, thereby enriching a greater number of people with the value of the information.

With the emergence of these platforms, social learning will join formal and informal learning as one of the three key modalities in the next decade and beyond. The problem, however, is that in this early stage, many social learning initiatives falter for lack of use and never achieve their original goals. The reason for the failure is that most emerging social platforms are simply enabling technologies. They lack content and an existing vigorous community. They can be thought of as “empty drums.” For a social community to be successful, three core ingredients are required: (1) an enabling technology; (2) a vibrant community; and (3) multi-modal content. With no community and no content, there is simply an empty container. Users don’t contribute because it looks like no one visits and no one visits because it looks like no one contributes.

Content is clearly the key to breaking this cycle. The good news is, most learning organizations have spent years building their content resources, so they are now well-positioned to leverage them in the service of social learning. A variety of online learning assets can be used to seed social interaction and also keep activity focused on serious, business initiatives. When offered within the realm of learning, where a captive base of users already exists, content seeds can quickly blossom into rich, collaborative interactions.

As with informal learning, search is a central capability. Users want to be able to search for other users with similar interests and information needs. This objective can be accomplished on a social platform that enables users to create profiles, discover one another, co-create useful content in context, share it, tag it and rate it (all the functions one expects to find in a typical social community).

Social learning promises to bring corporate learning to a new level by using its unique power of amplification, spreading learning to more employees while engaging them in active communities that support their daily work needs. Far-flung colleagues will be able to come together through the Internet to solve problems of mutual concern or to help each other master new skills. The key is bringing together the right technology platform and multi-modal content to ensure maximum learner engagement, productivity and focus on business issues.

VI. MULTI-MODAL CONTENT TO SUPPORT FORMAL, INFORMAL AND SOCIAL LEARNING

As we have seen, multiple forms of content are needed to support learning programs: formal, informal and even social. And while we tend to talk about learning content as if it were a single, monolithic “thing,” in truth it is an incredibly complex mosaic, made up of many types of learning that have varying amounts of value, relevance, permanence, engagement, cost and time to develop. And while it may be used for formal or informal occasions, most content is not inherently one or the other; content can often be used and reused in various contexts to serve different needs. Modular and customizable content is the most desirable to integrate and aggregate more easily in a variety of contexts.

The challenge is to deliver the right learning to the right learner at the right time, at a “price” (measured in time and effort), that the learner is willing to “pay.” While the learner’s needs are primary, the learning professional must be aware of organizational capabilities and budget. Time, effort and cost are all associated with learning content. One must consider the return on investment of developing versus licensing content when such options exist. Figure 3 provides an example of a multi-modal, blended six-month leadership program with a breakdown of 50% e-learning, 25% classroom, 15% books and video, and 10% virtual sessions.

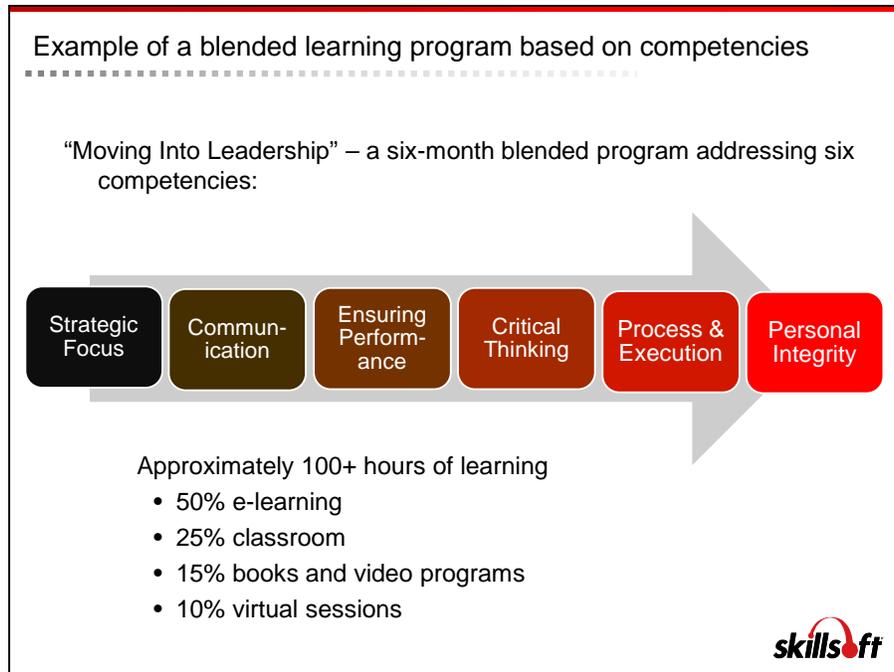


Figure 3: Multi-modal, blended learning program

VII. SUPPLY-CHAIN MULTI-MODAL CONTENT

To be effective at delivering complex, multi-modal learning programs, corporate learning departments must deliver a portfolio of learning “products” that cost-effectively satisfy a wide range of “customer” needs. They must get those products to “market” on time and forecast changes in demand and market conditions while constantly adjusting the mix, a practice not unlike the challenge experienced by other operational parts of the business. A manufacturing manager understands that success depends as much on suppliers as it does on internal manufacturing. They make build or buy decisions, balancing cost, resource, time-to-market demands and customer expectations. The need to get a product to market can quickly trump the need for a rich feature set.

The approach taken to obtain content assets, either through in-house creation or by acquiring them from third parties, must be aligned with intended use, business value, audience needs and expected shelf-life. Given the wide-ranging learning needs of most enterprises, it is not surprising that many organizations acquire content from many sources—off-the-shelf suppliers, niche vendors, companies with tools that create content on the fly, among others.

Highly critical or unique content may require a sophisticated, highly-customized solution (such as an online simulation). On occasion, a particular piece of content with high visibility to a large audience—perhaps a short video used as an introduction to an on-boarding program—may not be very complex, but its value is derived from the tone it sets for the company culture. In most cases, however, rather than focusing on a few high-value pieces of content, it is more prudent to acquire content covering a broad range of subjects in multiple forms.

It is equally crucial to maintain content currency. To manage large course catalogues, best-in-class vendors offer various solutions to reduce administrative burden close to zero. Business needs change over time—often radically and with little notice. The nimble learning organization needs to respond to these changes quickly, efficiently, and effectively.

VIII. CONCLUSION

To satisfy ever-increasing business demands, today's learning organization must know how to acquire and manage a continuous stream of content. A ready "inventory" of modular learning assets of different types must be available on demand to serve a variety of formal, informal and social needs. Equally, companies must introduce effective systems that customize, aggregate and deliver learning in a variety of contexts. The trick is to apply a systematic process to the acquisition and "manufacturing" of learning programs so that new learning needs can be quickly addressed without lengthy development cycles. Finally, by embracing new social learning platforms, learning organizations can "amplify" the value of learning content, increase focused collaboration around important business issues and, ultimately, propel business IQ to new levels.

IX. ABOUT THE AUTHORS

John Ambrose is senior vice president of strategy, corporate development and emerging business at SkillSoft. Earlier, he was named CEO of DeltaPoint, one of the earliest providers of website management tools. Ambrose was a founder of Books24x7 which was later acquired by SkillSoft. He lectures widely to learning professionals around the globe on the intersection of technology, publishing and learning.

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X. REFERENCES

1. **Bersin, J.**, How Executives Stay Informed: A Study of Resources Used and Time Spent Locating Critical Business Information. Bersin & Associates, November 2005.
2. **Anderson, C.**, A Look at the Industry in 2010, Chief Learning Officer, (January, 2010), <http://www.clomedia.com/business-intelligence/2009/January/2844/index.php>.
3. **Anderson, C.**, Cost and Availability Drive Modality Mix, Chief Learning Officer, (July, 2009), <http://www.clomedia.com/business-intelligence/2009/July/2675/index.php>.
4. **Rowe, K. A.**, Training Across Generations: Workplace Issues, Vol. 25. ASTD. © 2008. Books24x7. http://common.books24x7.com/book/id_29235/book.asp.
5. Datamonitor. Remote Workers in the Contact Center: Breaking Down the Walls of the Contact Center. Datamonitor plc. © 2005. Books24x7. http://common.books24x7.com/book/id_15011/book.asp.
6. AnalystPerspectives. Outsourcing & Offshoring: An Update. Books24x7, Inc... © 2009. Books24x7. http://common.books24x7.com/book/id_33328/book.asp.
7. **Cheese, P., Thomas, R.J., and Craig, E.**, "The Summary in Brief." The Talent Powered Organization: Strategies for Globalization, Talent Management and High Performance. Soundview
8. Executive Book Summaries. © 2008. Books24x7. http://common.books24x7.com/book/id_25010/book.asp.
9. **Horrigan, M. W.**, Employment Projections to 2012: Concepts and Context, Vol. 127, No. 2, Office of Occupational Statistics and Employment Projections, Bureau of Labor Statistics (February, 2004) <http://www.bls.gov/opub/mlr/2004/02/art1abs.htm>.
10. Occupational Outlook Handbook, 2010-11 Edition, Computer Network, Systems, and Database Administrators, Office of Occupational Statistics and Employment Projections, Bureau of Labor Statistics <http://www.bls.gov/oco/oco2001.htm#addinfo>.

11. **Grantham, C. E., Ware, J.P., and Williamson, C.,** "Chapter 6 - The Virtual Workforce". Corporate Agility: A Revolutionary New Model for Competing in a Flat World. AMACOM. © 2007. Books24x7. http://common.books24x7.com/book/id_19357/book.asp.
12. **Rozwell, C. and Otter, T.** Key Issues for Corporate Learning Systems, 2010. Gartner Research ID Number G00174053, February 12, 2010.
13. **Jordan, B.,** From Training to Learning in the New Economy, http://www.lifescapes.org/Papers/0212_from_training_to_learning.htm.
14. **Paradise, A. and Patel, L.,** 2009 State of the Industry Report: ASTD's Annual Review of Trends in Workplace Learning & Performance, American Society for Training & Development, ISBN-10: 1-56286-561-7, (2009).
15. Chief Learning Officer Magazine, Business Intelligence Industry Report 2008, 40-41, (no publication date provided).
16. **Rozwell, C.,** Forget ROI, Measure Time to Competency to Calculate Learning Value. Gartner Research ID Number: G00169917, August 7 2009.
17. **Tobin, D. R.,** "Chapter 4 - The Manager's Role in Independent Learning". All Learning is Self-Directed: How Organizations Can Support and Encourage Independent Learning. ASTD. © 2000. Books24x7. http://common.books24x7.com/book/id_1713/book.asp.
18. **Cross, J.,** "Appendix B - Where did the 80 Percent Come from?" Informal Learning: Rediscovering the Natural Pathways that Inspire Innovation and Performance. Pfeiffer. © 2007. Books24x7. http://common.books24x7.com/book/id_18385/book.asp (accessed June 15, 2010).
19. **McAfee, A.,** Enterprise 2.0: new collaborative tools for your organizations toughest challenges. Boston MA: Harvard Business Press, 2009, p. 47-48.