


December 2015

Employee Motivations for Workplace Learning and the Role of Elearning in the Workplace

Jason G. Caudill
King University

Follow this and additional works at: <http://digitalcommons.apus.edu/internetlearning>

 Part of the [Online and Distance Education Commons](#), and the [Training and Development Commons](#)

Recommended Citation

Caudill, Jason G. (2015) "Employee Motivations for Workplace Learning and the Role of Elearning in the Workplace," *Internet Learning*: Vol. 4: Iss. 2, Article 4.
Available at: <http://digitalcommons.apus.edu/internetlearning/vol4/iss2/4>

This Article is brought to you for free and open access by the ePress Journals at DigitalCommons@APUS. It has been accepted for inclusion in Internet Learning by an authorized administrator of DigitalCommons@APUS. For more information, please contact digitalcommons@apus.edu.

Employee Motivations for Workplace Learning and the Role of Elearning in the Workplace

Jason G. Caudill^A



Workplace learning is increasingly important in the dynamic competitive environment faced by organizations throughout the world. As the needs of a successful organization continually change there is a need for the employees of that organization, at every level, to update and expand their skills to match the needs of the organization. This places workplace learning in the position of serving employees at different levels of the organization and with different professional skills and responsibilities. In order to best ground workplace learning design as an aspect of the organization's overall strategy it is important to recognize the common elements of all workplace learning design and their importance in supporting the success of the firm. These common elements are increasingly best served by the use of workplace elearning approaches. This paper will examine workplace learning as a strategic focus of the modern firm and the common elements that are present across all types of training in the workplace as well as the unique elements of elearning in the workplace.

Keywords: workplace learning, elearning, learning organization, ADDIE

Introduction

The competitive environment for almost every industry is increasingly dynamic and both the work and technology environments are rapidly changing. Kyndt, Raes, Dochy, and Janssens (2012) explain that these changes and the shifting focus to knowledge work are driving firms to shift their focus to more highly skilled workers. These changes are challenging companies to continually update and improve their processes and, as a result, employees at every level are

increasingly expected to continually learn new skills to keep pace with the changing needs of their company and their customers. While the content of learning activities differs among industries and even among different categories of employees in a single firm, there are many common themes that support the need for, and delivery of, workplace learning for employees.

By addressing these common elements, firms can better construct an overall philosophy of workplace learning for their employees. The process will be similar to many other strategic management

^A **Dr. Jason Caudill** currently serves as an Associate Professor of Business at King University. His education includes a BS in Business Administration, an MBA, and a PhD in Instructional Technology from the University of Tennessee as well as a graduate certificate in Strategic Management from Harvard Extension School. His research interests include technology management, online learning, and the management and markets of higher education.

processes, with the first steps focusing on identification of need and subsequent steps working to identify, implement, and evaluate the solutions to the identified need. Needs at the corporate level may need to be addressed at multiple employee levels, with multiple learning approaches, but the core of the process should be a unified strategy to improve employee and company performance to better serve the customer.

These employee needs and motivations apply across learning platforms, but the delivery mechanism for instruction in the workplace is increasingly that of elearning. In the context of the overall need for workplace learning and employee motivations for learning a well-designed elearning program addresses the needs of multiple stakeholders. To address this workplace learning as a whole is discussed and then the elearning component is added into the context of the broader workplace.

Beyond the tools used to perform the job, employees today are also responsible for learning about changes to the company's approach to doing business, changes to what customers need, and changes to the competitive environment.

Learning's Role in the Workplace

Traditional views of functional areas in a firm may relegate workplace learning to only a human resource function. The reality of the modern environment, however, is quite different. Harmon (2015) identifies Learning & Growth Measures as one element of a departmental scorecard applied to departments, processes, and activities across

an entire firm. This expansion of learning into every part of a firm is a natural extension of the need for all functional areas in a firm to continually grow and improve service to the increasingly complex and competitive external environment in which all industries are working today.

Learning activities in the modern firm can encompass a number of different areas. Technical learning involves developing new skills for new tools, whether those skills are applied to a new software application, new manufacturing equipment, or some other technical aspect of the business. This type of learning is often the first type considered because of the rapid advance of technology in all aspects of life but it is not the only area of change and learning for today's workers.

Beyond the tools used to perform the job, employees today are also responsible for learning about changes to the company's approach to doing business, changes to what customers need, and changes to the competitive environment. These learning activities ultimately connect to the overall corporate strategy of the firm and, by extension, impact every employee, in every department, at every level (see *Figure 1*).

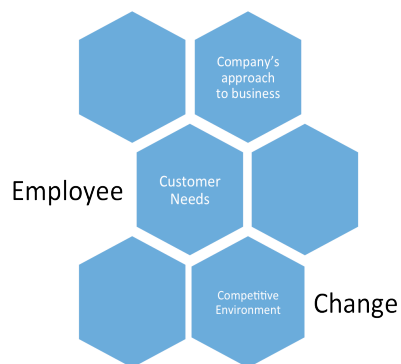


Figure 1. Employees are responsible for change according to customer needs.

Learning in the modern workplace is much more than a question of introductory training or policy updates, although those elements do require training to maintain

employee knowledge and skills. Learning today defines the competitive firm as a whole; the market rewards learning organizations. Pantouvakis & Bouranta (2013) explain that, "...the success of an organization does not depend solely on the current levels of employee skills, capabilities and knowledge, but mainly on their ability to improve themselves on an ongoing basis" (p 49).

Investments in employee learning have been shown to benefit organizations' innovative performance (Sung & Choi, 2014), positively contribute to knowledge transfer for multi-national corporations (Minbaeva, Pederson, Bjorkman, Fey, & Park, 2014), and is positively related to overall firm performance (Aragon, Jimenez, & Valle, 2014). Other studies identify other specific benefits to the firm of employee learning but clearly the firm as a whole is improved when employees are more knowledgeable. Given that the firm, as a whole, impacts a reasonable part of the workplace learning approach, and also includes identifying how common factors across the firm impact the design and administration of learning for employees.

Design Factors in Workplace Learning

The first step in approaching the design of a workplace learning program is to define what workplace learning is and what it is intended to accomplish. Wang (2011) defines workplace learning, "as the means, processes, and activities by which employees learn in the workplace from basic skills to high technology and management practice that are immediately applicable to workers' jobs, duties, and roles" (p 196). This definition aligns with the identified benefits of workplace learning as it addresses learning across an organization at different levels and in different specialties but all focused on

improving the work of the firm.

While there are multiple approaches to learning design Simmons (2011) identifies the ADDIE model as a good match for workplace learning because, "...the model calls for continual evaluation, much like the strategic management, continuous improvement, and monitor and adjust/backwards design models commonly used in business" (p 3). This focus on continual improvement and monitoring is a good fit for the dynamic competitive environment in which modern firms are operating. With a focus on the core steps of the ADDIE model; Analysis, Design, Development, Implementation, and Evaluation, a firm can develop quality workplace learning opportunities for the workforce that will benefit overall organizational performance.

"...the success of an organization does not depend solely on the current levels of employee skills, capabilities and knowledge, but mainly on their ability to improve themselves on an ongoing basis"
(Pantouvakis & Bouranta, 2013, p 49).

The ADDIE model approach to learning design provides the flexibility to address needs at any level and in any department of a firm. In reviewing the approach, it closely mirrors many of the strategic management problem solving frameworks. Analysis provides an opportunity to look at current practices and current results and identify where there is a need for change. Design creates possible solutions to the identified need. Development identifies and builds a selected solution from the design phase. Implementation takes action to apply the selected solution to the

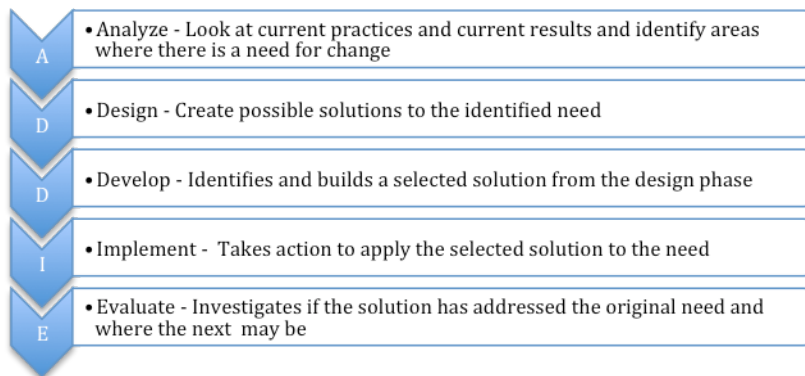


Figure 2. ADDIE Model Steps

need and evaluation completes the cycle by investigating if the solution has addressed the original need and where the next need may be (see *Figure 2*).

This overall model of learning development, and its similarity to the decision-making and management models used throughout the business world, highlights the extent to which workplace learning is truly a distributed activity. This distributed nature lends itself to viewing workplace learning as an overall organizational strategy rather than a compartmentalized activity for a specific department or a specific user group. To better understand this, the common elements of training for different groups in the organization will be explored.

Individual Participation in Workplace Learning

While workplace learning is an activity to benefit the organization as a whole, all of the learning ultimately takes place at the individual level. In order to effectively deliver a workplace learning experience the individual must be addressed. Kyndt & Baert (2013) explain the development of an individual's participation in a workplace learning experience as starting, "...from a generally formulated or felt need that evolves into an educational need, which leads toward

an intention to participate in learning and a concrete educational demand, resulting in the actual participation in a learning activity" (p 275).

This first step in the individual learning experience matches the first step in the ADDIE model of workplace development; recognition of a need. For the individual this is an educational need. This recognition of need leads employees to engage in learning activities for a broad variety of reasons, including their ability to maintain performance and retain employment and also to learn how to operate in the increasingly dynamic work environments of today's organizations (Billet & Choi, 2013). Employees clearly recognize a need for learning in connection to their role in the workplace, but the next step is achieving the necessary motivation to take action to satisfy their perceived need.

Motivation for learning occurs on several different levels: the individual level, the learning activity level, and the social context level (Kyndt & Baert, 2013). While individual motivation is addressed here the role of the organization in serving the learning activity and the social context of the learning will be explored in the following section. McQuaid, Raeside, Canduela, Egdell, and Lindsay (2012) found that for low-skilled workers motivating factors for pursuing

training included getting a better job, personal improvement, being better at work, and improving skills. These motivations for learning are reflected in Kyndt, Govaerts, Keunen, and Dochy's (2012) work that identifies learning intention as an employee's plan to remedy perceived needs in knowledge, skill, or attitudes necessary to perform their jobs. Knowledge workers, which encompass an ever-increasing number of the modern workforce, are shown to have similar learning motivations to low-skilled workers. Batalla-Busquets & Pacheco-Bernal (2013) identify learning motivations for skilled workers as including personal growth, belonging to the organization, and expected career progress.

These similar motivations across employee categories identifies that addressing concerns of professional advancement and personal growth are necessary to effectively deliver learning opportunities for an organization. The positive aspect of this is that employees recognize the need for continued learning opportunities and also identify the value that potentially comes from such activities. The challenge to the modern firm is to create an environment that successfully delivers that experience to the worker.

Organizational Involvement in Workplace Learning

Organizations, as the ultimate beneficiaries of workplace learning, have an important role in the overall learning environment and the motivation of employee learning. To retain the best employees, organizations in today's market must provide a positive climate for both work and learning (Govaerts, et al., 2010). Kyndt, Raes, et al. (2012) explain that for an organization it is, "...important to know how employees learn and which factors contribute

to a stimulating learning environment" (p 272). This one statement speaks to two important roles of the firm in delivering workplace learning. The first is to provide proper motivation, through a supportive environment, and the second is to deliver a valuable learning product to the employee.

The core factor in providing motivation for employees to engage in learning activities is the design of the job itself. Kyndt, Govaerts, et al. (2012) identify five job characteristics that influence employee learning motivation:

- The degree of autonomy
 - The content and complexity of the job
 - The learning potential
 - The task variety
 - The mobility opportunities the job offers
- p 183

Thus, at the very beginning of an organization's role in the workplace learning process the fundamentals of organizational behavior are in play. Job design plays a critical role in preparing employees for motivation and participation in workplace learning and includes such diverse ideas as organizational structure, job expansion, job rotation, and retention and promotion policies. This point should not be surprising. As organizations transition to being learning organizations and all employees are impacted by the demands for continuing learning it is natural that the fundamental design of the firm will be influenced by the changes occurring everywhere else. The first step in being effective in workplace learning is to design and operate a workplace that aligns with the modern structure of a learning organization.

Moving from job design to specific elements of organizational culture that can motivate employee learning there are three organizational learning environment

factors: managerial support, job support, and organizational support (Cheng, Wang, Moormann, Olaniran, & Chen, 2012). This continues the trend that has been identified in the construction of a learning organization. Support for workplace learning is not a single department or a single level within the organization; support to motivate employee learning happens across the organization and throughout the organizational chart. Everybody in the organization has a role to play in building a positive learning environment for employees (see *Figure 3*).

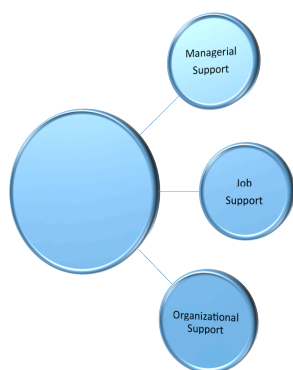


Figure 3. The three organizational learning environment factors: managerial support, job support, and organizational support.

This helps to frame the overall discussion of workplace learning and its importance to remaining competitive in the modern, dynamic market. While the engagement of the individual employee in learning activities may be the most visible element of workplace learning what is actually happening is that organizations are becoming learning organizations. As learning organizations, the effective use of employee learning leads to positive organizational performance and positive economic performance (Pantouvakis & Bouranta, 2013). The delivery phase of workplace learning will also encompass all areas of the firm.

Once an effective climate and support structure has been established, a company must then effectively deliver the learning experience in which employees have been motivated to engage. Kyndt, Raes, et al. (2012) explain the need for a new perspective on the delivery of learning as a whole:

...because of the rapidly changing context in which organizations operate, a necessity arises for employees to learn in a way that involves integrating materials from different sources, relating new information to prior knowledge, applying knowledge differentially according to the situation. In other words, a need for a deep approach to learning comes to the fore (p 272).

The delivery of the learning experience for employees most directly involves the implementation and evaluation stages of the ADDIE model, although the earlier analysis, design, and development stages directly impact the success of the program. As with the individual employees, firms first must recognize the need for learning to take place. This recognition of need can be either an emphasis on repairing an identified failing in the firm or it can be a process of finding and enhancing existing solutions to make further improvements to a process (Govaerts, et al., 2010). Once the need is identified then the design and development phases can be pursued.

Designing and developing a learning experience for employees, regardless of the topic of the instruction or the role of the employee, is perhaps the most important unseen activity involved in the delivery of workplace learning. At this stage specific goals are identified for the training and details such as delivery format, scheduling, and

instructors are selected. While employees do want to engage in learning when there is a perceived need and a motivating atmosphere, they need to have identifiable goals for the experience in order to fully engage (Kyndt, Govaerts, et al., 2012). Once the goal is set and the employee engages with the training proper development helps to ensure that the employee remains engaged and successfully completes the learning process that will improve employee and firm performance.

Individuals engaging in workplace learning are motivated by factors such as personal improvement and career advancement. This means that they have an expectation that the learning experience will help them to achieve positive, meaningful outcomes. What this means to the development process is that the material that is covered, and the way it is delivered, must be relevant to the individuals who are participating. This means aligning content and delivery with the participants' responsibilities and the way that the firm conducts their operations. By properly grounding the delivery as a useful, applicable model the participants will have the opportunity to see a linkage between their learning and their work. With these development tasks complete the company can move to the visible part of the ADDIE process, the delivery.

Much of the delivery of the learning experience will be defined in the development stage. Delivery itself will mean deploying the planned learning process to identified participants to address the identified need. If the learning experience is well designed and well developed then the execution of the plan should go well. It is at this point that employees have the opportunity to directly engage with the content and begin the process of absorbing the material and learning how the new information or skills can improve their

work. At this point in the process the visible activity of the learning event concludes for participants, but for the firm the delivery precedes the final stage of evaluation.

As with any strategic initiative workplace learning needs to generate a positive return for the firm. This means that learning that occurs needs to be properly and consistently applied when individual participants return to their jobs. Determining whether or not this takes place, and whether or not the modified behavior has the desired impact on company performance, is the role of evaluation.

The evaluation following a workplace learning event may take multiple forms. In examining changes to quality metrics, production output, or other quantitative measures the evaluation is relatively simple. Over time following the training the quantitative data can be tracked, trends and performance benchmarks can be established, and correlations can be identified regarding whether training did or did not have a positive impact on employee performance. These quantitative measures, however, are only indicators of the learning's outcome and do not entirely address the efficacy of the program.

The ideal outcome of a workplace learning exercise is to positively impact the culture of the organization. While such a chance may manifest in quantitative outcomes, the real value of the change is one of moving towards a high performing culture. This means that employees adopt new ways of doing things and also integrate new ways of thinking and new attitudes in relation to their work. These kinds of changes in relation to workplace learning experiences help to move the firm to a true learning organization. The net effect of such cultural shifts in an organization is part of driving performance improvements that reach beyond the scope of individual

learning activities. As a learning organization knowledge and skills build throughout the organization even outside of formal learning activities.

The Role of eLearning in the Workplace

The importance of workplace learning in the modern, dynamic competitive environment is a set condition regardless of the delivery method for that learning. Elearning, however, delivers several advantages and is uniquely aligned with the identified preferences and motivations for worker engagement in the learning process. To satisfy those motivations elearning needs to be deliberately designed and assessed, and also integrated into the overall strategic approach of the firm.

As discussed earlier, learners in the workplace want to improve their skills and engage in learning activities that directly benefit their day-to-day work. Elearning is uniquely positioned to do this by linking the learning activities directly to the work and, through this close connection with the learner's responsibilities, motivating better engagement and retention than other delivery mechanisms (David, Selleh, & Iahad, 2012). Elearning also has the advantage of providing users with greater control of the learning experience in many different aspects. Providing greater control to the users increases both their satisfaction and motivation in the learning experience (Cheng, Wang, Yang, & Kinshuk, 2011).

This potential for increased learner motivation and satisfaction means that elearning is more than just an alternative method of delivery. In many situations elearning may be the preferred delivery mechanism for workplace learning. This preference is of course dependent on the individual learners and the content of the instruction, but used properly the method

has definite advantages. To capitalize on these advantages, however, the design of the elearning experience must be properly executed (see *Figure 4*).

Workplace elearning design begins at the foundation of the firm. As explored earlier it is critical for an organization, beginning with management, to support the learning activities and learning environment for employees. In the context of elearning specifically, Cheng, Wang, Moorman, Olaniran, and Chen (2012) explain that before investing in an elearning program management must eliminate organizational

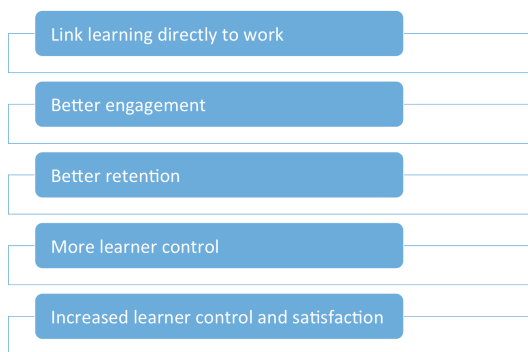


Figure 4. Advantages in developing quality online courses.

barriers and create a positive learning environment that also provides an appropriate reward system. This early engagement of management involves more than just establishing the organizational structure; it also helps to align the content of the learning experience with the needs of the firm.

Both workers and managers have an interest in a learning experience contributing to the workers' ability to perform better. Linking this to the design of elearning can create an environment of performance-based learning, where the goal is establish learning objectives and engage the learner in a process that achieves those set objectives (Wang, Vogel, & Ran, 2011). The actual delivery of the learning experience should

be closely linked to the learning needs of workers. For elearning design in the workplace this means utilizing andragogy and self-directed learning (Cheng, Wang, Yang, & Kinshuk, 2011).

The design aspects of workplace elearning are clearly a critical step in building a successful learning experience for the employees. For the firm there also needs to be a clear advantage to providing the learning opportunity to employees. When using elearning as a platform this means making a clear connection between elearning themes and workplace learning requirements. This is necessary because the real purpose of a workplace elearning initiative is for the firm to generate positive results in employee behavior and overall performance (Cheng, Wang, Yang, & Kinshuk, 2011).

Connecting elearning to the needs of the workplace goes beyond just the goals and objectives and includes the application of appropriate theories for the environment. "Theories specific to workplace learning can be categorized into four groups: adult learning, organization learning, Community of Practice (CoP), and knowledge management" (Wang, 2011). With so many different elements combining to create a successful workplace elearning experience an organization must be deliberate in their approach to the process. This involves including elearning as a component of the overall strategic plan for the firm.

For a workplace elearning effort to deliver the expected positive results it must begin with a sound plan. This plan is based on a business and people-centered strategy (Wang, Vogel, & Ran, 2011). The planning process, as part of a firm's overall strategic plan, is critical in today's business environment. The increasingly dynamic competitive environment has forced

firms to focus on how they can establish sustainable competitive advantage and one of those approaches, the improvement of their workers, is increasingly achieved through the use of elearning (Cheng, Wang, Yang, & Kinshuk, 2011). This strategic focus on worker development was reflected in the study by Cheng, Wang, Morch, Chen, Kinshuk, and Specter (2014) where they identified two of the four dimensions of workplace elearning as elearning for continuing education and professional development and the integration of knowledge management with elearning.

As knowledge workers increasingly become the engine of productivity and competitive advantage in the knowledge economy the development of those workers is of increasing importance to a firm's overall strategy. This drives the importance of workplace elearning, as, "Studies have also demonstrated a relation between the prevalence of ICTs (information communication technologies) at work and the rate of workplace learning" (David, Selleh, & Iahad, 2012). With worker development a premium concern for competitive companies, and worker development aided by the use of elearning approaches, elearning by extension is a component of creating and maintaining competitive advantage for the modern firm.

Because elearning is an important element of a firm's overall strategic plan the final element in its planning and implementation is the use of assessment. In workplace learning assessment this often takes the form of Key Performance Indicators (KPIs). Rather than assessing the learning process directly, KPIs assess the critical areas of individual and organizational performance that contribute to overall firm success (Wang, Vogel, & Ran, 2011). This approach, rather than simply measuring employees' academic mastery

of course content, examines the degree of positive impact that occurs following the training. Ultimately this information can be utilized to share knowledge and build a learning community in the firm (Wang, Vogel, & Ran, 2011).

This systematic approach to workplace elearning, from the first steps of matching the learning environment to learner motivations and establishing a learning culture to assessing the impact of the elearning efforts on organizational performance makes the application of elearning in the workplace unique. At its core, however, the process of planning, executing, and assessing the learning is very similar to how elearning is planned and deployed in any environment. The difference in the workplace is the clear strategic focus on bottom line performance. As such, workplace elearning must be developed from the beginning as a performance-oriented process that will deliver measurable performance outcomes.

Conclusion

Workplace learning is a key to success for the modern firm. It goes beyond the concept of simple training events and is focused on developing the capacity of employees throughout the company to perform better, to improve their own knowledge, skills, and careers, and through those individual improvements to drive positive change and success for the firm as a whole. The process is no longer an isolated practice or something that is limited to only the HR group, but a strategic imperative for every part of a company. Increasingly the mechanism for this effort is workplace elearning. The online environment delivers opportunities to employees that are beyond those of traditional classroom-based training events

and also brings additional benefits to the organization. Regardless of delivery format, motivated employees, positive learning cultures, and a dedication to sound practice are what will drive success for the modern firm.

References

- Aragon, M., Jimenez, D., & Valle, R. (2014). Training and performance: The mediating role of organizational learning. *Business Research Quarterly*, 17, p 161-173.
- Batalla-Busquets, J. & Pacheco-Bernal, C. (2013). On-the-job elearning: Workers' attitudes and perceptions. *International Review of Research in Open and Distributed Learning*, 14(1), Retrieved from: <http://www.irrodl.org/index.php/irrodl/article/view/1304/2417>.
- Billet, S. & Choi, S. (2013). Learning through work: Emerging perspectives and new challenges. *Journal of Workplace learning*, 25(4), p 264-276.
- Cheng, B., Wang, M., Moormann, J., Olaniran, B., & Chen, N. (2012). The effects of organizational learning environment factors on elearning acceptance. *Computers & Education*, 58, p 885-899.
- Cheng, B., Wang, M., Morch, A., Chen, N., Kinshuk, P., & Spector, J. (2014). Research on elearning in the workplace 2000-2012: A bibliometric analysis of the literature. *Educational Research Review*, 11, 56-72.
- Cheng, B., Wang, M., Yang, S., & Kinshuk, P. (2011). Acceptance of competency-based workplace elearning systems: effects of individual and peer learning support. *Computers & Education*, 57(1), 1317-1333.

- David, O., Salleh, M., & Iahad, N. (2012). The impact of elearning in workplace: Focus on organizations and healthcare environments. *International Arab Journal of e-Technology*, 2(4), 203-209.
- Govaerts, N., Kyndt, E., Dochy, F., & Baert, H. (2010). Influence of learning and working climate on the retention of talented employees. *Journal of Workplace learning*, 23(1), p 35-55.
- Harmon, P. (2015). The scope and evolution of business process management. In J. vom Brocke & M. Rosemann (Eds.); *Handbook on Business Process Management 1, International Handbooks on Information Systems*, Springer-Verlag, Berlin Heidelberg.
- Kyndt, E. & Baert, H. (2013). Antecedents of employees' involvement in work-related learning: A systematic review. *Review of Educational Research*, 83(2), p 273-313.
- Kyndt, E., Govaerts, N., Keunen, L., & Dochy, F. (2012). Examining the learning intentions of low-qualified employees: a mixed method study. *Journal of Workplace learning*, 25(3), p 178-197.
- Kyndt, E., Raes, E., Dochy, F., & Janssens, E. (2012). Approaches to learning at work: Investigating work motivation, perceived workload, and choice independence. *Journal of Career Development*, 40(4), p 271-291.
- McQuaid, R., Raeside, R., Canduela, J., Egdell, V., & Lindsay, C. (2012). Engaging low skilled employees in workplace learning. *UK Commission for Employment and Skills*.
- Minbaeva, D., Pedersen, T., Bjorkman, I., Fey, C., & Park, H. (2014). MNC knowledge transfer, subsidiary absorptive capacity, and HRM. *Journal of International Business Studies*, 45, p 38-51.
- Pantouvakis, A. & Bouranta, N. (2013). The link between organizational learning culture and customer satisfaction: Confirming relationship and exploring moderating effect. *The Learning organization*, 20(1), p 48-64.
- Simmons, S. (2011). The origins and descriptions of ADDIE. Retrieved from: <http://www.shelbyesimmons.me/uploads/1/0/4/1/10414302/simmonsseaddiepaper.pdf>.
- Sung, S. & Choi, J. (2014). Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations. *Journal of Organizational Behavior*, 35, p 393-412.
- Wang, M. (2011). Integrating organizational, social, and individual perspectives in Web 2.0-based workplace elearning. *Information Systems Frontiers*, 13(2), p 191-205.
- Wang, M., Vogel, D., & Ran, W. (2011). Creating a performance-oriented elearning environment: A design science approach. *Information and Management*, 48(7), 260-269.

Definitions

ADDIE model: An instructional design process model consisting of Analysis, Design, Develop, Implement, and Evaluation

competitive environment: The market in which an organization offers its products or services to customers also pursued by other organizations

elearning: The process of obtaining new information through a digital medium

key performance indicators (KPIs):
Measurable elements of an organization's
operations that link to successful outcomes

learning organization: An organization
that has sufficient processes and resources
to continuously generate and retain new
knowledge

stakeholders: Individuals or organizations
impacted by an organization's actions and
performance

workplace learning: The acquisition of new
information or sk.