

**Artefact 5**  
**Final Project**  
**Literature Review of Corporate e-Learning**  
**MDDE 601: Intro to Distance Education and Training**

**Summary**

By the time I took this course, I was confident in my attempts to enter a career in e-learning. I reviewed my professional and academic background and embarked on a literary review that would further help me understand e-learning within corporations. MAIS 644: Adult Learning and the Crisis of Democracy encouraged me to learn more about workplace learning. I was fascinated with the politics of learning in the workplace.

This literature review helped me understand the integration of workplace e-learning and one of the most important aspects which is evaluation. This literature review also served to “show” our research methodology. Re-reading my methods for this exercise continues to surprise me. By the time I completed this course, I had a good handle on graduate student work, and the many ways to apply interdisciplinary thinking to topics I am interested in.

This project helped me gain a better sense of the vocabulary and the culture of corporate e-learning, and it introduced me to several different career choices. I began to learn more about the learning and development field, joining the Institute for Performance and Learning to find additional focused learning opportunities. I found a group of people who love learning and development and are excited about collaboration. I began working with them regularly and feel like I have a small but strong committed network of professionals to help me with my career goals.

My favourite findings in this paper come from articulating how learning in corporate spaces occurs. I enjoyed learning how a constructivist epistemological point of view can integrate strategies that align the foundations and environments of corporate spaces. I learned how students in corporate spaces are reluctant to take part in learning opportunities. This is a theme that is echoed in my talks with members of the Institute of Performance and Learning.

This paper helped me realize how confident I was becoming as a student. The struggles I had experienced with time management, troubles with research and time I spent editing simple grammatical errors did not appear as prevalent as they once had. I was able to concentrate on the content of the paper instead of the process.

Lastly, I learned about Kirkpatrick's evaluation model. This model is talked about often in the Learning and Development field, and after this paper, I feel confident in being able to apply it. Although I have much to learn about e-learning and the learning and development field. I am confident in where I need to focus my attention, and in leveraging what I know about adult learning pedagogy and adult learning psychology and being able to apply those skills to the e-learning field.

### **Literature Review of Corporate e-Learning**

I consider myself to be a fan of learning and learning pedagogy. I love uncovering how the brain acquires knowledge and have been fortunate enough to explore this phenomenon along the lifespan from infant learning to senior learning. I enjoy learning and want to uncover the many ways that we gain information. This literary review will explore e-learning in a corporate setting. I want to explore this type of learning, as it is a new learning realm that I discovered during the covid pandemic.

#### **Reason topic was chosen:**

My career for the past 15 years has been in children's museums and alternative learning institutions. My job was focused on hands-on learning for children and families. I had the amazing opportunity to transfer my knowledge of children's museums and play learning to libraries. This offered me a glimpse into lifelong learning and play learning not just as means of acquiring knowledge but as a tool for social good. I was working in libraries where the covid pandemic happened, and it had a significant toll on my emotional health which caused me to review my career. I lost my job and had to reassess where my career would take me. I analyzed my interactions within the educational field and noticed that although playing with young children is extremely

rewarding, as a subject matter expert, I had been focused on teacher training for many years. I had also spent some time working in provincial and municipal governments and was fascinated by the education that happened within the system. Every few months we were asked to complete a new learning module on topics such as cyber security, respectful workplace training, psychological first aid, how to book meeting rooms, etc. I never met the people behind those modules and after years of being in front of thousands of children daily, this contrast appealed to me. I took my severance and signed up for my masters, which I had been putting off for many years. Before covid the thing that was holding me back was deciding between a master's in fine arts and a master's in early childhood education. Now I had to decide whether a masters in distance learning or a masters in adult education would get me to where I wanted to go. In the end I flipped a coin, and it landed on Adult Education, but I am taking electives in distance learning to get me closer to my ultimate career goals. I chose this topic to explore professional development through distance and online learning methods. I have experienced many types of e-learning modules, I particularly enjoyed those that were set up like a game, and thoroughly disliked those that included videos. I have experienced a variety of incentives including entering a draw to win a day off if the modules were completed by a certain day, or sternly worded emails asking why they hadn't been completed. **When reviewing research in the field of e-learning within corporations, the topics that should be considered include the definition of e-learning, the factors that lead to e-learning acceptance, understanding of how e-learning is integrated into the workforce and how to evaluate e-learning within organizations.** These concepts will offer me the building blocks to e-learning and help

me understand this aspect of educational pedagogy which until recently was completely foreign to me.

## **Search Parameters**

The articles for this literature review were sourced using Google Scholar. Athabasca University is currently undergoing a revamp of their website and web services and the weekend I set aside for research, the library was down. After I had completed my outline for review, I searched the Athabasca library for more recent articles. The umbrella terms that I used were “e learning” and “corporate”, “workplace” and “institutional knowledge”. I noticed a pattern in the articles I was finding, and began grouping them by subject and combined those subject headings with e-learning: “e learning + evaluation”, “e learning + methods” etc. I made sure to find at least 2 different articles to support each topic, once I read through each article, I was able to find a few more relating to the same topic. I also looked at terms such as “blended learning” and “online learning” but found that when the focus was corporate learning, the term “e-learning” was most widely used.

## **Annotated bibliography and Analysis**

### **Definitions**

E-learning has evolved in different ways in Business, Education, the Training sector, and the Military. In the school sector, e-learning refers to the use of both software-based and online learning, whereas in business, it refers solely to a range of on-line practices (Nicholson, 2007). Kumar et al., (2018) noted that e-learning is

learning that is supported by digital and electronic tools and media, it is learning that is facilitated by technology. My focus for this paper is closely associated with the definition of e-learning as defined by Zornada (2005), where e-learning technologies are used to support the implantation of training and development strategies within corporations. One example is the use of programmed learning style modules delivered to the desktop, this way employees can work through them at their own pace and spread them out over several sessions without leaving their workstations (Zornada, 2005). Some companies use an e-learning portal that offers a complete learning management system providing employees access to a total learning solution for online or instructor-led courses. The system maintains a list of courses taken by an employee and through the learning plan provides the capability of identifying gaps in an employee's skills. It can then register the employee for courses to fill skill gaps. Skills assessments are often done through a performance Management system and are initiated after a dialog between an employee and their manager (Zornada, 2005). Whether the employee enters a portal, or the modules are sent to the individual employee, e-learning within corporations for the purpose of this paper can be generalized as being independent, online, divided into short modules, are initiated by the employee and can be returned to as the employees time allows; they are done as part of the employee's regular workday when their workload allows.

### **Theoretical frameworks**

Creating a sense of community is important, however the nature of e-learning in corporate environments is designed for the individual learner, it is noted that while new IT capabilities in virtual learning environments may affect engagement of learners,

pedagogical factors, such as quality of course/task design, guiding structures, use of appropriate tools, personalization, accessibility, and humanization are the most important in “creating” a sense of place and engagement for online learners. (Khazanchi, et al., 2022). A proposed contingency theory-based model of e-learning includes ideal profiles of e-learning that result from a combination of learner engagement, learner style, learning task and the appropriate leveraging of IT capabilities. The challenge of e-learning is that it must fit a variety of learning styles which means that a variety of pedagogical methods must be employed (Khazanchi, et al., 2022). In the past 20 years, companies have changed their mindset from viewing their employees as equipment or tools to valuable human capital (Wan, 2007) Over the past decade alone, over \$200 billion has been spent by organizations to deliver format or on the job training to their employees (“2009 corporate learning factbook”, 2009,p.161; Ford et al.,1997) The importance of corporate education cannot be understated, and the need to create the best possible learning experience is extremely important. Tomlinson (2000) notes that a common-sense approach to addressing the needs of a variety of learners is the best practice in a mixed ability classroom. It is important to understand the various different learning styles to garnish better results and to reduce variation in student achievement, understanding the different learning and instruction styles ensures that organizations are maximizing the capabilities of all employees, and should do a thorough assessment of employee’s learning styles during onboarding (Blackburn, 2009).

We understand that the acquisition of knowledge is formed from pedagogical models, and are the basis of all learning theories (Aparicio et al., 2006) These models act as mechanisms linking e-learning theory to learning practice (Dabbagh, 2005) The

pedagogical models in e-learning are: Open learning, distributed learning, learning communities, and communities of practice (Aparicio et al. 2006) Jonassen et al. (1997) present 5 instructional strategies used by instructors in order to engage learners. These differ from learning strategies because learning strategies reside in the learners as mental tools that they use to understand and acquire knowledge; each instructional condition should meet a different instructional strategy (Jonassen et al, 1997). These are supported by the following attributes: learning is a social process, learning in groups is fundamental to achieving knowledge, distance becomes unimportant and space questions are blurred, teaching and learning can be segregated in time and space (Jonassen et al, 1997). Since we understand knowledge to depend on the knower's frame of reference then a constructivist epistemological point of view will integrate strategies that align several foundations and environments including psychological, pedagogical, cultural, pragmatic and technological strategies (Jonassen et al., 1997). Oliver and Herrington (2003) developed an e-learning framework that is composed of technological elements grouped into three areas of learning: resources, supports and activities. This framework contains the three main components of the information system: people, technologies, and services. People interact with the e-learning systems, e-learning systems enable the interaction of different groups of users and technologies provide support to integrate content (Jonassen et al, 1997). In other words, it is the instructional strategies aligned with the e-learning pedagogical models that align the activities of e-learning for students.

## **Perspectives**

I was working for a government agency during the Truth and Reconciliation commission and was lucky enough to attend focus groups made up of staff brought together to discuss the future integration of indigenous education modules for all those working within the government. I was astounded to learn that my coworkers were opposed to additional training. Many felt resentful that they were being forced to do this training. It made me wonder about workers perceptions, and about the factors that lead to workers resenting workplace training or education. Cheng et al (2012) looked at the organizational learning environmental factors including managerial support, job support and organizational support on employee's motivation to use a workplace e-learning system. Research notes that a key barrier to the success of e-learning initiatives is a lack of adequate consideration on enhancing employees' engagement (Admiraal & Lockhorst, 2009). Cheng et al (2012) examined the role of work environmental factors to explain employees' motivation to use an e-learning system in the workplace. Their findings noted that both perceived managerial support and perceived job support had a positive impact on the usefulness of workplace e-learning systems as it helped identify knowledge gaps and helped with the acquisition of work-related competency. They also noted that perceived organizational support also had a positive effect on the usefulness of workplace e-learning as it supported social learning including peer mentoring, coaching and teamwork climate (Cheng et al., 2012). Jovic et al. (2013) identified three factors that influence students' attitude towards e-learning including e-learning usefulness, ease of use, and design. Their study suggests that with greater perceived usefulness, ease of use, and liking of the design of e-learning systems, students will have a more favorable attitude towards that system. Another aspect that affects

motivation is the demanding work environment, as e-learning in corporations is driven by individual motivation (Ettinger et al., 2006). Féraud, 2005 urges companies to promote the fact that e-learning is available to employee students at all hours, every day, and is accessible from both home and work. Although I disagree with this notion, because the incentives to complete the coursework are beneficial enough for employee students to work on their course work outside of paid hours. Companies have to develop a culture of learning, and a reputation where employees know that the material delivered will be of high quality (Féraud, 2005). Companies should also train employees to embrace e-learning in the same way that e-learning is used to train other aspects of the employees on new skills, processes, practice and company strategies (Kotter, 1996).

## **Benefits**

The benefits to both the organization and the employee are numerous. Ingram et al., 2002 noted the advantages of e-learning for organizations include greater employee satisfaction and creating a workforce that has a competitive advantage (Ingram et al., 2002). E-learning offers many cost saving advantages including, lower travel costs for trainers and trainees, and the ability to keep the learning material in a centralized permanent location (Chen, 2018). Freifeld (2014) also reasoned that companies acknowledge e-learning for cost-effectiveness. Learners can revisit the eLearning courses as many times as desired for refresher purposes [12], unlike in the instructor-led mode, for which companies pay thousands of dollars for participants' travel, conference rooms, food, and hotel rooms to retrain employees.

## **Drawbacks**

As with any educational model, the success lies in the delivery. Ceobanu & Asandului (2009) pointed out the challenges in setting up e-learning including a lack of identification for the needs of the class, this comes from a lack of analysis of the need even when the need was identified, and overall strategic design decisions in areas such as the structure of the course, the methods the media used, and course management. They mentioned that problems could arise any point along the development and presentation of the course including a lack of instructional design and development issues, a failure to develop important and necessary instructional design elements such as graphic design and a lack of revision which could result in a lack of reiterative improvements (Ceobanu & Asandului, 2009) Not surprisingly, some of these problems may arise if the organization focuses on new technology and not instructional design, or if the organization has a lack of understanding in educational pedagogy or how to take average of electronic media (Ceobanu & Asandului, 2009). Devarankona (2009) noted that e-learning does eliminate the valuable aspects of in person learning including the ability for the subject matter expert to ensure that everyone is learning what they need to at the correct time. For some organizations, training is one of their largest expenditures, and it is often seen as an expense instead of an investment, this can cause issues when creating a cost benefit analysis, many students and managers may not understand e-learning's value (Wentworth, 2006). From a student standpoint, many learners are used to the social and cultural aspect of in person, face to face learning, and may not be able to adjust to e-learning (Khazanchi, et al. 2022). This combined with

the lack of appropriate class design may cause an increase in dropout rates (Khazanchi, et al. 2022).

## **Evaluation**

Evaluation, if done properly, can help offset the negative aspects that e-learning might encounter. In the book, *Evaluating E-Learning* by William Horton, (2001) the reasons why evaluating e-learning is important were highlighted. First, it will justify the investment that was put into training, next it can help make better decisions about training as proper evaluation methodology will help inform business decisions including which direction to go with the training, which software to use and whether an external partnership or firm can offer training. Proper evaluation helps hold participants accountable as it reveals if the results promised were met within individuals, facilitators and suppliers (Horton, 2001). Evaluation can demonstrate financial responsibility by creating a cost benefit analysis. It can help improve the training quality and effectiveness of the training, good evaluation will highlight which areas need improvement and highlight which areas have excelled. Lastly, the process of evaluation places attention on results and encourages learners to assess their own learning, analyze what is being taught and how the material is being presented (Horton 2001). It is important to invest in good evaluation, Horton (2002) notes that good evaluation will be flexible and suitable for a variety of training, it should be simple and easy to complement, reliable and able to accurately measure and predict results. One must be extra careful to ensure that training evaluation should also be economical.

The Kirkpatrick (1994) four levels of evaluation model approached evaluation by using a 4 step process. First it measures learner's reaction to the course, this is often done after the course by using surveys and questions about the course, its content, the style of delivery, the materials used, and the interactions that occurred. Next, it measures what was learned by comparing tests that were done before the training began with tests done after the course completion. Level three measures the changes in the learner's behaviour after the training - here supervisor's or peers' assessment is taken into consideration. Lastly it asks to show what the business' impact is, have workers implemented what they learned and are they using it (Kirkpatrick, 1994).

### **Summary and Discussion**

The list of articles above provided an overview of e-learning methodology, including a discussion on the definition and parameters of e-learning (Nicholson, 2007), (Kumar et al.2018), (Zornada, 2005), all together, the definition can be summarized as a learning method where e-learning technologies are used to support the implantation of training and development strategies within organizations (Zornada, 2005). A theoretical framework provided by (Khazanchi, et al., 2022), (Wan, 2007), (Tomlinson, 2000), Blackburn, 2009), (Aparicio et al., 2006), (Jonassen et al., 2007), and (Oliver and Herrington, 2003) can be summarized as e-learning being a theory-based model which results from a combination of learner style, learning task and the appropriate leveraging of IT capabilities. Pedagogical models in e-learning include open learning, distributed learning, learning communities and communities of practice (Aparicio et al., 2006) Oliver and Herrington (2003) developed an e-learning framework that includes the technological elements grouped into three areas including resources, supports and

activities. This discussion also highlighted the various perspectives of e-learning , its benefits including perceived usefulness, ease of use, and liking of the design of e-learning systems, which resulted in students having a more favorable attitude towards e-learning (Jovic et al.,2013) and the importance of companies developing a culture of e-learning as part of the workplace culture. Unavoidably, there are always drawbacks including issues in the presentation and delivery of material and misuse of media to present this material. Luckily, the list of articles above also provided a variety of different evaluation methods to learn how to create better e-learning systems.

## **Discussion**

After this analysis it is clear to me that the educational pedagogy is vital when embarking on e-learning implementation. It is important to know why the students are learning what they are learning, this will ensure that the training is a cost benefit for the organization and that students are accepting and feel empowered by the course material. The benefits of e-learning will outweigh the negatives if evaluation can show that learners are implementing what they are learning, though ongoing assessment learners can improve the quality of their own learning and improve the quality of the learning at hand.

## **Impact of the review**

This review introduced me to e-learning within a corporate setting. I was able to understand the nuances of the education system and why learning is important both from a cost benefit perspective and to enhance the value of the working capital within organizations. In early childhood learning we call this “making learning visible” in

corporate learning, it takes the form of cost benefit analysis and thorough evaluation. Although this literary analysis provided me with a beneficial introduction to the methodology and pedagogy of e-learning I want additional information on a topic that I uncovered early on, which was the importance of addressing individualized learning styles. I would be interested to know how this works, and what it looks like during implementation. Are there any examples of companies that have successfully attempted this? This review mentioned that corporations in the last decade have spent \$200 billion to deliver training for employees, while also mentioning that many corporations see employee training as an expense. I feel that there is more to uncover here, do companies that invest in the training of their employees retain more staff than those that don't. For employees that participate in corporate learning, is the learning that they acquired more of a benefit once they leave, or it is a benefit if they stay.

The importance of knowing employees learning styles was highlighted, but much of the literature still shows a one size fits all approach. With my background knowledge of pedagogy and individualized learning plus my affinity for pay learning this aspect of e-learning has great implications for my future practice. To be able to create e-learning opportunities that can benefit a variety of learning styles seems incredibly fancy for me.

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