Learning Preferences and Other Considerations for
Designing and Developing Distance Learning for
the Corporate Distance Learner
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Introduction

Traditional classroom training, once the mainstay of corporate instruction has been making a steady transition to distance and web-based (internet or intranet-based) training. Companies with varying shifts, telecommuters, as well as those with multi-national and international locations, have found that traditional means of educating their employees lack the flexibility and expansive delivery necessary to remain competitive in today’s business world.

The literature abundantly describes the compelling reasons for the shift to online learning in corporate America. Some of these include convenience, adaptability, and cost-effectiveness. Blake, Gibson, and Blackwell (2003) stated, “Traditionally, employees have had to travel to the classroom for instruction, but with Web-based learning, the classroom is only as far as your desktop or laptop” (p. 5). Trainers can update their material immediately and not concern themselves with ancillary issues such as printing and distribution. Any employee worldwide would be able to access the changes with guaranteed standardization and without significant delay. Another positive feature of web-based training is that it cuts much of the costs associated with travel and meeting space overhead, as well as the cost of time away from work.

Because of these advantages, web-based learning in the corporate environment is here to stay. Chellman and Duchastel (2001) declared, “Distance education is seen as an important answer to the professional development needs of large masses of the population” (p. 147). Unfortunately, its staying power does not reflect the challenges that the corporate learner may face in this new environment. Some of these challenging aspects may include adapting to the method of delivery, not having choice in the subject
matter, and having limited access to an instructor. It is important for trainers and instructional designers to take these challenges into consideration when creating and offering courses in an effort to find ways to engage the learner, maximize the benefits of the technology, and render the instruction most effective.

This literature review will provide an overview of the literature of student learning preferences and other variables that should be taken into consideration when designing for corporate distance learners. This synopsis will also share the methodology used, and provide possible additional research paths for future researchers to explore in the future.

Learner Qualities

Current literature indicates that the qualities of the learner can impact his or her success at Web-based learning. Many studies have noted the importance of personal qualities such as motivation, attitude, and self-sufficiency as factors of learner success with distance education. Gibson (as cited in Meyer, 2002) stated that an introvert is more successful in an online environment. Lim (as cited in Meyer) went on to say that self-directedness and computer self-efficacy have been found to be important for student satisfaction with online learning. Many students prefer traditional classroom training and do not readily adapt to Web-based instruction. A learner’s negative attitude towards the online environment could affect his or her performance. A positive attitude supports student learning (Meyer, 2002).

Terry (2001) found that when compared with traditional courses, dropout rates of online courses have a higher dropout rate which were due to learners not being able to readily adapt to the self-paced approach. Baylen and Taylor (1998) found that students’
expectations and perceptions of online learning affected student outcomes. A variety of articles discuss various definitions of learning styles. Sarasin (as cited in Meyer) defined learning styles as the ability to analyze and understand learning as a result of the primary sense involved (visual, auditory, tactile, or kinesthetic). Whitesel (as cited in Meyer) defined learner style as the individual’s ability to learn by direction, interaction, inquiry or creation.

Learning Styles

Previous literature (e.g., Goldstein, 1998; Dong, 2001; Gray & Palmer, 2001) and some more current (e.g., Sabry & Baldwin, 2003) focus on learning style as an indicator of successful learning at a distance. Simonson, Smaldino, Albright, and Zvacek (2003) stated that the more the distance education teacher knows about the individual student within the whole class, the more he is able to apply the available education tools to the particular learning situation. Magoulas, Papanikolaou, and Grigoriadou (2003) utilized adaptive web-based learning as a way of maintaining appropriate context for interaction between the student and the system accommodating a diversity student characteristics, needs, and abilities.

The corporate commercial world has recognized individual differences and has tried to accommodate them by the way it enables potential customers to browse their web sites in different ways (Karuppan, 2001). Online education has begun to follow suit by moving away from the one-size-fits-all mentality by incorporating simulations, games, chat forums, message boards, video, audio, etc.
Motivation

Several articles discuss the difference between the motivation of corporate
distance learners and that of college distance learners. Corporate e-learners differ from
most college distance learners in a significant way. That is, a college student will usually
voluntarily enroll himself or herself in a course because there is the hope that successful
completion will help them gain better employment. The other expectation is that the new
knowledge or skill that they will acquire will allow them to be promoted to a higher
position within the organization for which they currently work. This student is highly
motivated because their motivation is self-improvement (Frankola, 2001).

The literature goes on to show that while the latter of these two examples can be
found in the workplace, the corporate employee may be directed by a person in authority
to complete a particular course (Frankola, 2001). Therefore, the e-learner is not internally
motivated in this instance. Simonson, Smaldino, Albright, and Zvacek (2003) stated that
intrinsically motivated learners tended to have higher success rates when completing a
distance education course.

Distance education promotes self-study, which introduces the issue of time
allotment. Weaver (2002) asserted that “a learner may not be motivated to finish a course
if they’re expected to do it while maintaining their same workloads” (p. 46).

Weisenberg (1999) contended that “…students need to learn to construct their
own knowledge, become autonomous and self-directed, and expert at knowing how to
learn, as opposed to passive acquires of knowledge” (p. 150).
Self-directedness in learners involves an ability to identify their own learning goals and pursue them independently. It also requires skills in effectively engaging the assistance of others within a socially constructed community of practice (Smith, 2003).

_Autonomy_

Other articles discuss the significance of learner autonomy in correlation to success with online learning. Many distance learning courses involve some kind of social isolation and requires the student to operate independently (Parkinson, Greene, Kim, and Marioni, 2003). Owsten (as cited in Huang, 2002) stated that when courses were offered entirely online, learners needed to create a self-paced and independent environment for learning.

Parkinson, Greene, Kim, and Marioni (2003) indicated that students understood the need to take ownership for their learning and to be more responsible for the knowledge they acquired.

_Prior Learning Experience_

Current literature suggests that prior learning increases the chance of a successful online learning experience. Borthick, Jones, and Wakai (2003) states that without adequate domain knowledge, learners will not have prior knowledge and will not be able to activate an appropriate knowledge structure.

Perception is also affected by prior learning experience. Most students, since childhood, have experienced most of their learning in a traditional face-to-face structured classroom. Christensen, Anakwe, and Kessler (2001) discussed the similarity between the distance learning environment and the traditional setting in terms of interaction, community, support, and guidance. They submitted that these factors allow for a more
positive perception of the distance learning environment and reduction of negative effects of distance learning on the *traditional learner*. 

**External Factors**

In addition to intrinsic learner qualities, there are external factors that are also to be taken into consideration when designing and developing distance education for learners in corporate America. 

*Instructional Design*

Instruction should be designed to complement the learner’s strengths or be able to strengthen his or her deficiency, relevant to the learner, and in alignment with the organization’s values and goal. 

Osciak and Milheim (2001) spoke of consideration for the mental processes that learners utilize during instruction and specifically, of the Howard Gardner’s theory of Multiple Intelligences and how they impact the classroom. Gardner described eight intelligences: linguistics, logical-mathematical, spatial, musical, bodily kinesthetic, interpersonal, intrapersonal, and naturalistic. Osciak and Milheim said of instructional designers who incorporate Theory of Multiple Intelligences in their design of course content, “Incorporating Multiple Intelligence theory into the design of instruction can provide multiple avenues for learning based on an individual’s preferred style regardless of the discipline or the geographic dispersion of the intended learners” (p. 356). 

Parkinson, Greene, Kim, and Marioni (2003) suggested that instruction should be designed to be responsive to the variety of learning styles in the class. Hunt (2003) declared:

Educators must adapt their pedagogical strategies to students’ learning
preferences in order to foster an equitable learning environment….although we might rightly assume that instruction should always match students’ learning styles, attempting to avoid every mismatch could deny some students the opportunity to learn those intellectual and communicative skills that they would have the least opportunity of coming to know on their own. (p. 135)

Karuppan (2001) asserted that flexibility is a very important consideration in order to appeal to students and facilitate learning. She went on to say, “…materials should be presented in a manner consistent with a student’s particular learning style” (p.134).

Perez and Foshay (2002) found programs that correlated course objectives with online lessons in a meaningful way and connected assignments and class activities were more successful than programs that used online content as drill-and-practice.

The literature also describes implications of other design templates. Borthick, Jones, and Wakai (2003) explained designing for zones of proximal development (ZPDs) as having to design learning experiences that support learners’ development of capabilities so that they learn to do without assistance things that they could initially do only with assistance. This view contends that if a learner collaborates with one or more knowledgeable persons, he can perform at a higher level of complexity than on his own.

Interactivity

Frankola (2001) asserted that the best level of interactivity not only creates a sense of community for participants. It also stimulates learning through discussion of ideas and practicing skills. Edmundson (2002) found it difficult, as a student, to execute
projects and participate in discussions without knowing her classmates. As an instructor, she implemented the use of personal web pages and introductory group activities to identify common interests and responsibilities, in turn encouraging early interactions faster and feelings of unity towards a common goal.

McAlpine (as cited in Smith, 2003) discussed the need for instructional methods that include designs for interaction among students and interaction with learning materials to be developed within organizations.

Management of Student Expectations

A variety of journal articles speak to managing student expectations. Faculty may need to manage student perceptions with clear explanation of what is expected of the students. Edmundson (2002) recommends that instructors set expectations and generate enthusiasm with the schedule and the syllabus.

Simonson, Smaldino, Albright, and Zvacek (2003) indicated that students may experience barriers to persistence when completing a distance course resulting in less diligence in completing online coursework. Instructors should inform students of the time allotment necessary to pace themselves accordingly. The availability and location of resources should also be explained so that learners could be successful in the endeavor.

Hunt (2003) asserted that the establishment of clear criteria and the clear communication of expectations contributed to students spending time on important educational tasks.
**Instructor Involvement**

Previous studies mention the effect of managerial oversight of the course offerings when discussing human capital in relation to web-based training. Hunt (2003) asserted the following:

Students desire prompt feedback from their instructors. In addition, they expect the feedback they receive on assignments to be meaningful. In other words, students want to know not only what they did to earn a particular grade, but what they can do to improve the next time they are assessed. (p. 134)

Edmundson (2002) referred to feelings of frustration and disappointment when instructors did not give feedback as expected on assignments that were posted online. Milestones and comments on student work to keep students on schedule and interested. Huang (2002) asserted that a certain amount of instructional support was needed for a better perception of the learning experience in the online environment.

Blignaut and Trollip (2003) aptly stated, “An instructor who is physically in a traditional classroom is perceived as being present, even if he or she is silent. However, being silent in an online classroom is equivalent to being invisible” (p. 347). They went on to say that faculty should give substantive and frequent feedback to ensure learners’ satisfaction with their online experience.

**Technical Support**

Currently, distance education relies heavily on computer technology. So it stands to reason that if the software or hardware *stops*, so does learning. A recurring theme in the body of work in distance learning is that strong technical support is a necessity. Perez and Foshay (2002) stated that technical support via help desk or program contact was the
most important factor cited by both learners and faculty in making their program successful. They went on to say the following:

Interactive and frequent contact was important for success. Although many learners appreciated the self-paced and individualized format of distance learning programs, they were quick to note when questions or issues were resolved via email or help desk, there were higher levels of satisfaction with the course and their expressed comfort level with technology. (p.19)

Methodology

Much of the research in distance education is conducted in the educational setting. The researcher utilized Nova Southeastern University’s electronic library as her primary resource for compiling journal articles. Under the subject heading, Proquest Research Library Complete was of most value in retrieving articles related to the subject matter for this particular literature review.

The following search terms returned the most appropriate articles: distance learning, learning styles, learner preferences, corporate training, training design, instructional design, web-based learning, online learning, work environment, and e-learning.

The researcher also used Thomson Learning Infotrac online college library to search for additional items. Using the aforementioned search terms, she was able to retrieve articles from foreign journals as well as additional American journals.

In two instances, the researcher was able to track down additional resources online. These references that had been cited in journal articles retrieved from Proquest.
These were exceptions, as the researcher believes that the validity of many online articles is uncertain. Since the impetus for the search began through the valid source of scholarly journals, the researcher considered it a reliable resource.

As indicated, the researcher utilized mostly scholarly journals for her research. Trade articles from appropriate journals, although of a more qualitative nature, were also used since most quantitative studies discussed distance learning and its considerations as it relates to higher education.

Conclusion

It is evident by the information I was able to acquire, more research is needed in distance education as it relates to the corporate environment.

Research could be done from the standpoint of profiling applicants for specific learning preferences as they relate to being successful in a blended learning environment with a distant learning component or a total distance learning environment.

This is especially important if the corporate learning system” currently reflects certain budgetary and resource limitations that do not allow for adaptation to various learning preferences. The information gained may be used to make effective training design decisions, and to organize and adapt the current material to match the typical learning styles that the organization tended to hire for specific roles in practical and cost-effective ways. For example, Smith (2001) stressed that for vocational learners, designers needed to focus more on observation and practice rather than learning through text or by lecture. The value of the knowledge of a new hire’s learning preferences could mean the difference between meeting a client’s need or not.
Studies may also be done to determine if successful distance learners in educational settings (as indicated by their resume) translate into successful teleworkers.

Future distance education researchers could take findings from studies conducted in educational settings and attempt to replicate in a corporate learning environment. This may result in changes in organizations in the recruiting, training, and development of associates.


_Academic Exchange Quarterly,_ 6(4). 88-93.


Huang, H. (2002). Student perceptions in an online mediated environment. _International
*Journal of Instructional Media, 29*(4). 405-422.


