

The Role Subject Matter Plays in the Decision to Offer Online Training

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INTRODUCTION

A plethora of factors influence an organization's decision to offer training online. Now, more than ever, companies must seek innovative ways to support three major business goals: expense reduction, revenue generation, and regulatory compliance (Biech, 2009). Online training addresses these goals by affording employees increased flexibility and opportunities for learning, coupled with lower administrative costs. But does the subject matter influence the

decision to offer training online versus face-to-face? Little, if any research has been performed on this topic. Does subject matter *matter*? After conducting in-depth, personal interviews with five human resource and training professionals whose companies offer online learning, our conclusion is "yes." There are certain subjects that these professionals view as being less effective if offered in an online environment. However, as this paper will reveal, necessity often trumps reason, and subject matter often takes a back seat to the reality



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of the need for convenience. But at what cost? As technology continues to evolve, creativity and innovation continue to play a prominent role in meeting the training and development needs of today's learner.

THE ROLE SUBJECT MATTER PLAYS IN THE DECISION TO OFFER ONLINE TRAINING

This article reports research involving the e-learning activity at five organizations: an institution of higher learning, a federal government agency, a state government agency, an international financial services organization, and a community hospital. Our interest was in determining what factors influence their organizations' decision to offer online training, specifically the role subject matter played in that decision making process. Because of the subjective and qualitative nature of this topic, the chosen methodology was in-person interview. This method allowed information to be obtained at a deeper level than could have been obtained through survey method and provided additional flexibility during the research process. At the requests of the human resources and training professionals interviewed, the organizations' names have been withheld and individual names are fictional.

EMPLOYEE DEVELOPMENT TRAINING AT AN INSTITUTION OF HIGHER LEARNING

The first interview was conducted with the director of workforce development and international programs for one of the largest providers of online education. This organization serves approximately 40,000 students as well as provides training for 31,000 employees who receive continuing professional development. The university recently initiated a program designed to help other educational institutions create online learning programs. In addition to the online university, nine "ground

schools" (campuses) are located primarily in the Midwest. For the purposes of this research, we chose to focus specifically on the 31,000 employees requiring professional training and development.

Approximately 70% of the training offered to employees is online and the remaining 30% is offered face-to-face or blended, with most of that 30% representing a blended format. Their learning management system is a hybrid version that allows them to verify employee training activity for compliance and human resource reporting.

A limited number of courses are offered face-to-face because the university has determined that certain subject matter is more effective in person. In general terms, they include courses that require critical thinking or increased skills application. The decision to begin with a course online followed by a face-to-face session happens on occasion. This is done on a case-by-case basis. The organization has no concrete rules governing what merits this decision to utilize a hybrid or blended approach.

His philosophy regarding employee development training is "*education lends itself to an online offering. Concepts can be taught online. Reinforcing application of skills sets, however, require an interactive, face-to-face environment for practice and demonstration of skill sets mastery*" (Anderson interview, 2009). For example, an employee needing sexual harassment prevention training may begin the training process online in order to demonstrate knowledge and understanding of current legal and organizational protocol. However, role playing scenarios that indicate that the employee can internalize the concepts and demonstrate appropriate behavior in sensitive situations may follow in a traditional classroom environment.

When provided examples of subject matter selections, the interviewee was asked to share whether an employee professional development course at his com-

pany would be offered online or face-to-face. The following responses were noted:

- New software or general computer courses (*online*);
- Math and/or computation skills courses (*online*);
- Compliance related topics (*online*);
- Supervisory skills programs (*begin online to teach and demonstrate knowledge; follow up f2f course to practice communication techniques*)
- Teambuilding (*online if sole objective is to teach employees about the roles of team players and related subject matter; blended in order for employees to fully experience the essence of working together as a team*)
- Language programs. (*Face-to-face. Note: It is the opinion of the interviewee that languages cannot effectively be taught online. Courses like Rosetta Stone are most effective; however, tonal languages, i.e., Chinese, need human interaction and opportunities for continual dialogue with others to learn*)

An interesting example was offered that supports the theory that subject matter does count when choosing the most appropriate training method. Their Workforce Development department secured an engagement with a local federal government institution for an extensive online communications course for their administrative staff. "They went nowhere with it" (Anderson interview, 2009). The client was unhappy with the results and did not feel that the participants were able to successfully apply what they learned after the online training. As a result, a subsequent six hour, face-to-face training class was provided to the same participants. It was met with great success. "If you want adults to demonstrate their ability to think on their feet and truly *apply* what has been taught, you need to do this in a face-to-face environment." (Anderson interview, 2009). Furthermore, it is his opinion that memory retention is enhanced when training is in-person because participants are able to bet-

ter incorporate the principles taught into their actions and behavior.

TEACHING THE FEDERAL GOVERNMENT NEW TRICKS

January 2008 was the official kick off of a federally mandated learning management system (LMS) that ushered HR and training professionals at this federal government agency into a "brave new world." "We went kicking and screaming" was the response from the Department's employee development specialist who was interviewed. One and a half years later, equipped with a comprehensive library including approximately 2,000 SkillSoft courses online, this HR professional is still mourning the loss of predominantly brick and mortar classroom style training. Prior to January 2008, a limited number of online courses were offered and had been created by internal design staff.

Federal government employees have the ability to log into the LMS system to peruse the many course offerings and take advantage of the any time, any place learning that these systems offer. Every topic or course highlighted in the agency's LMS lists both an online and in-person course offering.

Our interview subject did not have general statistics available regarding online usage with the exception of the most popular course. COTR (Contracting Officers Technical Representation) is a mandatory course for anyone spending government dollars, such as HR, procurement, or government credit card users. Regulatory guidelines require this mandatory training and the department has seen a dramatic increase in the amount of people taking this course online. At the time of this research, 200 agency employees have been COTR certified online. The course had previously been solely offered as a week-long face-to-face training session. According to the interview subject, the certification is a regulatory "hoop to jump through," hence

the popularity of the online option. Her description of the course was that "it required no interaction with other employees but strictly a working knowledge of rules and regulations" (Greene interview, 2009).

Several other factors were listed as having a greater influence over employee online training activity, namely convenience, cost effectiveness, and perceived reduction in time spent in training. One employee who contacted this HR professional with questions regarding the online versus face-to-face decision stated, "instead of spending an entire day in the classroom, I'll just do this condensed version online." Our subject demonstrated the ease of taking a communications course online by logging on during our interview. To mimic the ever-so-popular MasterCard commercial: "F2F communications training: half or full day of employee's time. Online communications training: one hour. Cost of not even leaving your desk: priceless."

But at what cost? In the above scenario, the *online* course offered a series of scenarios with accompanying multiple choice responses with no opportunity to fully integrate or practice the concepts taught. Our subject stated that a *live* communications course (which is still offered) would offer multiple opportunities to practice skill sets. At the present time, no forms of videoconferencing or related technology are being used to provide a learning experience that provides any form of face-to-face experience. All online courses currently offered through their LMS are for parties of two: the student and his or her computer.

The interviewee, who readily professes that she is "not a fan of online learning," commented that she often receives phone calls from department managers looking for customer service training for their departments. In most cases, the manager will first inquire if there are any live offer-

ings and will only choose the WBT option by default.

Although this organization is fully utilizing online training, she believes it is not by choice, but by necessity. That being said, several years ago one of the sites experienced a major plutonium spill. This critically dangerous situation prompted intense safety training throughout the entire organization. An influx of contract subject matter experts and trainers were brought in to conduct a series of training sessions on hazard recognition controls and respiratory protection. Does subject matter determine the training method? In this case, absolutely. All training was performed in a live, face-to-face environment due to the "seriousness of the subject" (Greene interview, 2009). According to this interviewee, the option of online training was never suggested or discussed.

Additionally, two other subjects were mentioned as still being offered only in face-to-face context: ergonomics and team-building, once again suggesting this agency's view that subjects requiring practical skills practice or genuine human interaction cannot effectively be taught via the computer-mediated communication.

ONLINE TRAINING IN THE STATE GOVERNMENTAL SYSTEM

To compare and contrast the role subject matter plays in a different governmental setting, the e-learning coordinator for a state agency serving 7,000 employees was interviewed. This organization has offered online training for four years and also utilizes the same SkillSoft learning management system offered by the federal agency whose employee was interviewed. The interviewee at the state agency estimates that approximately 40% of their employee base takes advantage of state offered training programs. Of those employees, approximately 50% of their training is through the web-based offerings. Of that

50% of WBT, approximately 5-10% is blended.

In this state government system, individualized online training is not mandated but could be considered a benefit of state employment. According to this interviewee, the state's individual offices have to pay a fee to enable their employees to have access to the many programs offered through SkillSoft. For that reason, they often encounter resistance from some offices that do not want to make the investment. Perhaps this attitude trickles down to the employee level, accounting for the relatively low percentage of employees who take advantage of this training. That being said, he explained that employees with hopes for advancement typically will seek training as a vehicle for promotion.

The employee's interest in a particular subject matter often inspires the search for online training. Employees enjoy the flexibility of taking courses that have the potential for improving current job qualifications, providing personal growth opportunities, or preparing them for advancement on their chosen career ladder. Additionally, an employee may use work time to take online courses, pending approval from his or her supervisor. Like others, the interviewee at the state agency cited convenience to the employee and reduced costs to the agency as primary motivating factors for choosing online over live classes. He also cited employee behavioral styles and job descriptions as influencing factors. For example, he stated that IT personnel lean toward the online offerings because of the nature of their business, whereas social workers seek live, face-to-face training. The nature of the social workers' job, combined with their social personalities, lends itself to a live, more personalized training environment. However, their schedules will not often permit it because of unexpected court dates and other job duties. Once again, they often choose online by default. IT staff prepare for certifications that are

routinely administered electronically, so it is only natural that they use CBT resources to practice for the certification exams.

From an agency perspective, subject matter such as sexual harassment prevention and Americans with Disabilities Act compliance are offered live. Their decision to offer compliance training in-person initially seemed to contradict our earlier findings, but the reason given for this venue was "because we've always done it that way and there are certain state mandates that require the training be presented live" (Olsen interview, 2009). At the conclusion of this interview, it seemed convincing that no one set of rules applies to all organizations. Subject matter is indeed a very gray matter.

E-LEARNING AT AN INTERNATIONAL FINANCIAL SERVICES ORGANIZATION

An officer and program specialist in the Learning & Performance Solutions Group of a large financial services organization was interviewed. The company serves over 200 million customers in over 100 countries. She brought a diverse mix of experience to the interview, having previously worked as trainer, instructional designer, and project manager for the training division during her tenure with the company.

The company has offered some form of online training for approximately 10-15 years, but it has only been the past four to five years that this training format has been a structured, organized, and predominant part of their customer service training program. The focus here was solely on their efforts in this functional area for the purposes of this study.

Seventy percent of their customer service training is self-paced, text-based web training. Of the 30% remaining, a "significant" portion is blended. This format increases efficiency for the organization by allowing it to train employees when needed. Delaying training until a certain

number of employees have been assembled for a f2f session is not an option for this constantly changing and growing organization. In addition, the online format addresses the issue of providing critical information to employees with varying schedules, learning styles, and reading speeds. Additional methods of online training include instructor-led synchronous sessions utilizing Microsoft Live Meeting.

Since the nature of customer service training requires participants to hone interpersonal skills, the company recognizes the need to incorporate instructor and participant interaction into the format of some training, hence live (f2f) and online synchronous sessions. However, subject matter such as new customer service processes, regulations, and other technical aspects of the job is offered online and self paced. The financial industry is heavily regulated; therefore, this format allows the company to offer consistent, precise information to all employees involved. These modules are short (1 to 1.5 hours in length) and require only that employees demonstrate understanding of the information presented.

But does subject matter play any role in training format decisions? The proof is in the programs. New hire training has always been reserved for live, classroom-style environments. "This training is conducted face-to-face because of the volume and complexity of material presented, the outcome desired (skill development) and the fact that we want to set the right tone" (Gouker interview, 2009). According to this source, training that focuses on attitude and communicating the organization's core values are perceived as so critical to the success of the company that it requires a more "powerful presence." "This must happen before the employee begins working the phones; it is that important" (Gouker, 2009). However, the company is discussing the possibility of conducting this important training online utilizing

advanced technologies but it is too soon to comment further. Should this occur, the decision is based solely on economies.

Like others, subject matter that necessitates a blended approach includes communication skills. Employees begin training online to learn appropriate responses to client situations but are then given live, supplemental training to provide a learning environment that allows practicing approved techniques. The interviewee was subjected to the subject matter litmus test. Her responses were as follows:

- Dealing with difficult people (*online is possible but f2f is most likely*);
- How to talk with a customer (*online, if designed correctly and the focus is on understanding customer behavior style. F2f is likely*);
- New regulations (*online*);
- Dealing with change (*online in order to "keep negative people from influencing others in a f2f environment"*); and
- Any subject matter with large volumes of information (*f2f in order to keep employees engaged*) (Gouker interview, 2009)

The organization continues to pursue advanced technology, which will allow them to present more questionable subjects online if it proves to effectively simulate a face-to-face, interactive environment. Again, convenience, ease of administration, and costs continue to be the driving factors behind this push.

A COMMUNITY HOSPITAL ON THE CUSP OF CHANGE

The final interview was with the human resource director for a full service inpatient and outpatient community hospital. This past year the hospital joined forces with MedStar, a not-for-profit healthcare organization that operates 20 businesses, including eight hospitals in the Maryland-D.C. area. This organization was selected because it was to introduce its *first* learning

management system to employees in September 2009. According to this interviewee, online employee training in the hospital environment is not prevalent in their geographical area. "There is a perception that because hospitals utilize state-of-the-art technology in patient care, they would also use innovative technology to train their staff. That is not always the case" (Remsberg interview, 2009).

Budget restrictions are a huge issue for this organization, and so the desire to save training dollars was a key motivating factor, along with convenience. It will be utilizing SiTEL, a healthcare LMS. Since hospitals operate 24/7, they look forward to using technology in a way that will offer them "round the clock training" (Remsberg interview, 2009).

Because their online courses will initially be individualized, text-based programs, their decision to continue offering some subjects face-to-face supports the notion that nursing competency training modules will continue to be live programs because the subject matter requires a hands-on approach, allowing the trainer opportunities to observe and coach students. In conjunction with the organization's new "no lift" policy, initial training on safe lifting equipment will be offered online with follow up face-to-face (practice) training. In the immediate future, all CPR training will continue to be offered in the traditional classroom environment; however, this visionary HR professional predicts that some day technology will create opportunities for Resuscitation Annie to make her debut on the big screen! For this healthcare organization in its infancy stages of e-learning, the future looks bright; but for now, subject matter still influences its choice of training venue.

OBSERVATIONS AND CONCLUSIONS

Five organizations, representing different industries and levels of experience in employee online training and develop-

ment, all answered an emphatic "yes" when asked if subject matter impacted the decision to offer training online versus face-to-face. To these professionals, online training is effective for topics including compliance, factual information requiring only an *understanding* of material, or subject matter that necessitates little (if any) interaction with another human being. But subject matter including language proficiency, teambuilding, communication, or other topics that address the dynamic interaction between people are still viewed as being more effective if a live element is included in the mix. However, necessity often trumps reason, and subject matter takes a back seat to the reality of the need for convenience, flexibility, and finding less expensive ways of training a company's most valuable resource. But at what cost?

Arbaugh's research on subject matter supports the relative importance of subject matter, but agrees that it is only one of several factors that influence online learning decisions. He concludes that "course conduct probably matters more" (Arbaugh, 2005). Institutional, behavioral, and technological variables cannot be ignored when determining impact (Arbaugh, 2005). Webster and Hackley (1997) suggest that students' attitudes and opinions regarding online learning play a significant role in the success of the delivery method chosen. Quoting Compeau and Higgins' research (1995), they suggest that "the belief that one has the capability to interact with a given technology plays a significant role in users' expectations and performance" (p. 1284). Certainly the interview with the employee of the federal government agency adds credence to this statement.

When considering the process of developing online training, organizations are challenged to continue thinking in terms of expanding the learning experience (Biech, 2009). For the five enterprises whose employees were interviewed, blended learning is the compromise for what some perceive as an inadequate

method for meeting the complete learning needs of their employee base. One fact must not be ignored; unlike academia, which emphasizes the pursuit and accumulation of knowledge, the corporate world is looking for a more concrete return on investment. Corporate online learning must ultimately improve performance and mastery of skill sets in order to earn respect as a viable training tool. Arbaugh suggests that additional research should be dedicated to identifying other characteristics related to subject matter that can influence the delivery choice and ultimately, its effectiveness. The question he poses for us to deliberate continues to be "when are variables such as technology, course structure or participant skills most influential"? (Arbaugh, 2005, p. 68). Webster and Hackley (1997) suggest that, as it relates to technology, factors such as quality, reliability, and "medium richness" are paramount. As online technology and multimedia continue to evolve, offering increased ways to realistically simulate live and interactive dialogue, perhaps subject matter will become a nonissue. But for now, it continues to be a force that cannot be ignored as it strives to compete for its seat at the decision making table.

As online learning becomes mainstream, the question becomes whether, at

some point in time, will we have regrets? Will learning suffer when in-person training becomes as rare as a handwritten letter? Will we ever find ourselves reverting back to "the basics," those nostalgic, pre e-learning days of brick and mortar? Can organizational training ever go "back to the future" if it is determined that there is no substitute for the personal touch? Or are we doomed to a learning environment addicted to the convenience and economies offered by the virtual world? Perhaps five years down the road it would be interesting to interview the same five companies to see what has changed. For these progressive organizations, will f2f ever stage a dramatic comeback should subject matter continue to matter? Wouldn't that be an interesting journey to document?

REFERENCES

- Arbaugh, J. B. (2005) How much does "subject matter" matter? A study of disciplinary effects in on-line MBA classes. *Academy of Management Learning & Education*, 4(1), 57-73.
- Biech, E. (2009, April). Learning eye to eye: Aligning training to business objectives. *T&D Magazine*, 50-53.
- Webster, J., & Hackley, P. (1997, December). Teaching effectiveness in technology-mediated distance learning. *The Academy of Management Journal*, 40(6), 1282-1309.