WHAT CORPORATE TRAINING PROFESSIONALS THINK ABOUT E-LEARNING: PRACTITIONERS' VIEWS ON THE POTENTIAL OF E-LEARNING IN THE WORKPLACE

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ABSTRACT

An exploratory study of 954 mostly veteran workplace learning professionals sought to determine why respondents adopt e-learning. The results indicated that they see e-learning was most valuable for delivering instruction governing familiar company tasks, such as providing information about products, fulfilling compliance requirements, and securing standardization. While the results were largely predicted by the investigators, respondents offered one surprising conclusion. Respondents believe that e-learning is useful in capturing and sharing best practices. They concluded that technology-mediated learning is less capable of providing instruction in tackling murky challenges, such as teaming, cultural understanding and passion for the work.

KEYWORDS

e-Learning, Corporate Training, Compliance, Globalization, Soft Skills, Corporate Training Professionals, Survey

I. INTRODUCTION

ASTD, the largest professional association devoted to workplace learning and performance, recently reported that corporate and government training and development increasingly relies on technology. Its *2008 State of the Industry Report* [1] found that e-learning now accounts for nearly one-third of the delivery of training and development content and services.

If you review the literature or overhear conversations at professional meetings and elsewhere, you'll discover that most practitioners focus on the forms that e-learning takes. Some favor scenario-based strategies, an approach allowing learners to assess situations and react appropriately [2]. Others are keen on podcasts or the virtual classroom. There are those who point to the benefits of knowledge bases or performance support tools, software that helps improve learner accomplishment [3]. Many tout online collaboration, exploiting social networking or user-generated assets, such as blogs, reviews, thumbs-up, and polls, among other web-user content. Still others encourage blends, combining these options to extend lessons, information and support in the workplace.

Attention to means has distracted many from another important question—towards what ends should e-learning be directed? This paper reviews responses from nearly a thousand practitioners to questions about the purpose of e-learning.

Kevin Oakes, CEO of the talent management agency, Institute for Corporate Productivity (i4cp), highlights three eras of technology-enhanced learning— computer-based training (CBT) being first, followed by e-learning, and now *results* [4]. The first two eras share a common focus—how e-learning happens. The third turns to *why,* the question examined in this paper.

The CBT era was transformed into what Oakes calls the e-learning era by the Internet. The Internet made it possible to distribute and update content with repurposed instructor-led offerings placed online and combined into libraries and suites of learning options. The virtual classroom became highly popular because of its wide reach and cost advantages. While the synchronous virtual classroom appeals to company learning executives because of its potential to morph into asynchronous assets, available anytime, the present study found that this advantage is unrealized today.

With government encouragement, evidence-based accountability, especially in medicine and accounting, the Results era was born. In business, the Results era requires outcomes achieved by delivering content and coaching online on demand [5, 6, 7, 8, 9, 10]. This ambitious goal offered the potential of linking e-learning to more easily transferable, less costly, and speedier delivery.

The Results era is not devoted to more or better training. For many[11, 12, 13], the benefit of technology was in delivering *less training* and achieving *more performance*, a goal achieved when technology-enabled content, information and support services become accessible as needed in the workplace. Many questioned continued reliance on classes fixed in time and place. Eliot Masie at masie.com and Jay Cross [10], among others, urged companies to pay attention to purpose, learning and performance. Their passion is for results, not for particular delivery systems.

In his e-learning tech blog [14], Tony Karrer identified two kinds of goals—flow and directed. Directed goals are specific; for example, product knowledge, up-selling, and how-to-use Twitter for learning. Flow goals are more exploratory as, for example, when a supervisor goes online to review guidelines for "progressive discipline" and instead meanders to a website about "puppy training." Karrer [14] admits he favors programs designed to achieve directed goals, concerned that informal learning, with less articulated strategies, may not often achieve defined objectives. Karrer quotes Jay Cross: "At a more fundamental level, the massive swing from the industrial age to the network era is accompanied by pervasive uncertainty. Twenty years ago, the business world seemed predictable; corporations wrote five-year plans. Today, it's a world of surprises. We're all tied to the unpredictable interplay of complex adaptive systems. It's tough to assemble a viable learning to-do list when you don't know what tomorrow will bring."

In considering the possibility of introducing outcomes with e-learning, two contradictory trends emerge. The first, characterized by Jay Cross, Howard Jarche, George Siemens and Stephen Downs and others, concludes that outcomes are as inscrutable and volatile as life itself. Echoing the philosopher John Dewey, they claim that the value of e-training emerges from the learning process. They encourage e-learning as a vehicle to enable connections, collaborations, discovery, and individual access. For them, outcomes are not established in advance. The opportunity to search, learn and contribute is what counts most.

In contrast, Claire Schooley [15], in a 2010 Forrester white paper, suggests that where e-learning is deployed now is where it is best exploited. She says that e-learning is successful in IT, compliance, certification and job-specific training and notes that there are increasing opportunities for business skills training in leadership and sales as well. Without citing evidence, however, Schooley questions the use of technology to provide instruction in negotiation and diversity skills and in facilitating trust and team performance. Schooley's view is quite popular. For her, e-learning is best at achieving prescribed outcomes, not so much at engaging in process, invention, or community. Her position echoes Tony Karrer's directed goals, focusing on e-learning to achieve desired outcomes.

Where do practitioners stand? Where do they think e-learning will contribute the most? In this exploratory study, we asked those who do the work of training corporate employees where they believe e-learning has the most potential.

II. METHODOLOGY

This study is exploratory and descriptive. Following a review of e-learning theory and practice, we identified 26 "snapshots" that capture key elements of technology-delivered learning and support. We also selected 20 likely aims of e-learning. In this paper, our aim is to discover what respondents feel are the most fruitful uses of e-learning.

A. Instrumentation

At first, we conducted a pilot of the instrument with 10 volunteers drawn from the target population. Based on the results, we abbreviated the questionnaire and adjusted nearly a quarter of the questions. The final survey was administered online using Survey Monkey (http://www.surveymonkey.com).

Respondents were asked to consider an array of possible uses, from direct to exploratory, and then to rate the potential of e-learning to advance that direction.

B. Sample

Five sources provided access to practicing professionals. The American Society for Training and Development (ASTD)'s Learning Circuits group, the e-Learning Guild, TrainingIndustry.com, and the International Society for Performance Improvement (ISPI) encouraged members to describe their practices. The online community PINOT: Performance Improvement Non-Training Solutions also invited members to respond. The sample strategy yielded 968 responses, all recorded in June 2009.

The final sample yielded representatives from each of the following broadly-defined organizations—corporations, 73.7%, academic/education institutions, 12.7%, and government-military organizations, 7.7%. A small percentage of respondents (5.9%) did not indicate an affiliation.

Table 1 describes study participants. Female respondents outnumbered males roughly two to one. More than 94% were older than thirty years of age. Respondents were experienced, with 61% in practice for more than 10 years.

Characteristic	**Number**	**Percentage of Sample**
Gender		
Female	557	65.9
Male	288	34.1
Age		
18-29	49	5.8
30-45	366	43.1
45-55	294	34.6
56-65	135	15.9
66+	6	.7
Years in Learning/Performance Field		
Not currently in the field	9	1.1
0-4 years	118	13.8
5-9 years	203	23.8
10-14 years	202	23.7
15-19 years	133	15.6
20+ years	189	22.1
Sector		
Academic/Education	100	11.7
Corporate	633	74.1
Military/Government	70	8.2
Not indicated	51	6.0

Characteristic	Number	Percentage of Sample
Role in Organization		
Leader	275	32.2
Non-leader	579	67.8

Table 1: Study Participant Descriptions (n=854)

C. Data Analysis

Survey results were exported from Survey Monkey and analyzed using SPSS Predictive Analytics Software (PASW). Our analysis also provided demographic data and then calculated measures of the central tendency for each of the 20 potential applications for e-learning. Secondary analyses were inferential. Analysis of Variance (ANOVA) tests and t-tests for Independent Groups were used to find differences between industries and respondent roles within the organization.

The limitations of this study must be acknowledged. An opportunistic sampling strategy was employed. Those who chose to participate were active in professional groups and were thus likely to be interested in continuing professional development. All groups sampled are based in the United States, although they actively welcome international members. While the number of responses is large, it was neither randomly generated, nor selected for or balanced to represent any particular aspect of the field. Another concern is whether respondents all hold the same definition of e-learning. As Rossett and Marshall [16] found in related research, there is no shared view of what e-learning is, potentially resulting in unfocused perceptions about its potential. These issues threaten our ability to make broad generalizations from the results since we are unsure how those less likely to participate in professional associations and networks might respond and how practitioners outside the US would react to the questions.

III. RESULTS

Our analysis found that practitioners favor e-learning for narrow topics and applications. *Keeping up-to-date on changing products* or *Fulfilling compliance expectations* were typical of those most favored. Our respondents favored topics with shared, time-worn definitions. Topics, such as career *growth* and *passion for the work* ,were judged less obviously achievable with e-learning.

When we compared responses from those with different job functions ("leader" vs. "non-leader," for example) or business sector (academic/educational, corporate and government/military), we encountered few statistically significant differences. With few exceptions (presented later in the Results section), respondents largely agreed on how they rate the purposes of e-learning.

Table 2 presents a summary of mean ratings for each of the 20 proposed e-learning topics, from highest to lowest appeal. Respondents were asked to rate the potential of each e-learning topic using a four-point Likert scale: 1=No potential, 2=Little potential, 3=Some potential and 4=High potential.

Use Options	Mean Rating	Standard Deviation
Staying up-to-date on changes in products, services and policies	3.72	0.57
Distributing great ideas and practices across the organization	3.71	0.55
Fulfilling compliance expectations	3.66	0.63
Becoming fluent about our products and services	3.64	0.64

Use Options	Mean Rating	Standard Deviation
Standardizing our efforts	3.61	0.60
Capturing great ideas and practices	3.57	0.63
Reducing errors	3.44	0.66
Managing projects	3.44	0.70
Increasing customer satisfaction	3.43	0.63
Reducing cycle time	3.31	0.80
Managing performance	3.31	0.69
Tracking promises about what people will do and achieve	3.27	0.78
Working well with global colleagues	3.27	0.93
Understanding the culture of the organization	3.24	0.74
Retaining great people	3.23	0.74
Working well on teams	3.22	0.66
Managing career growth	3.19	0.76
Increasing safety in the organization	3.13	0.87
Working well in unfamiliar settings	3.07	0.76
Increasing passion for the work	2.97	0.83

Table 2: Summary of e-Learning Potential Use Ratings (n=854)

A. Favored e-Learning Uses

When asked how e-learning might be *most* useful, given twenty possible applications, practitioners favored traditional training outcomes: *staying up to date on changes in products, services or policies* (mean=3.72, SD=.57)*; fulfilling compliance expectations* (mean=3.66, SD=.63); and *becoming fluent about our products and services* (mean=3.64, SD=.64). Typically, respondents favored instruction that would result in retention or provide just-in-time information.

The second most highly rated purpose differed markedly from the others named in the top five. *Distributing great ideas and practices across the organization* (mean=3.71, SD=.55) reflects the use of e-learning for collaborative, knowledge-generating purposes. What's more, this second most highly rated objective is similar to the sixth highest purpose, *capturing great ideas and practices* (mean=3.57, SD=.63).

We also noted consensuses among the 854 respondents in polling top-ranked purposes. The standard deviations for these items are low when compared to less appreciated e-learning purposes encountered at the bottom of the list. The consensus is intriguing given the diverse organizations in which respondents work.

B. Least Favored Purposes

Increasing passion for the work (mean=2.97, SD=.83)*, working well in unfamiliar settings* (mean=3.07, SD=76) and *managing career growth* (mean=3.19, SD=.76) received the lowest rankings. What accounts

for the lack of enthusiasm for these potential e-learning aims? We believe it is the uncertainty about definitions and measurement of outcomes and the emergent nature of their presence in most organizations. Two purposes related to high-performing teams were also at the low end: *working well on teams* (mean=3.22, SD=.66) and *working well with global colleagues* (mean=3.27, SD=.93).

C. Logistics in the Middle

Many purposes rated in the middle involved logistics, with topics that included *managing projects* (mean=3.44, SD=.70)*, managing performance* (mean=3.31, SD=.69), *reducing cycle time* (mean=3.31, SD=.80) and *tracking promises about what people will do and achieve* (mean=3.27, SD=.78).

D. Differences Based on Organization and Role

As noted earlier, we investigated differences based on the type of organization in which the respondent worked and respondent's role ("leader" vs. "non-leader"). Few significant differences emerged from either analysis. Tables 3 and 4 summarize the handful of purposes with significant differences among organizations and between the two role classifications.

Purpose	**Role**				
	Leader (n=275)		**Non-leader** (n=579)		
	Mean	SD	Mean	SD	sig
Becoming fluent about our products and services.	3.73	0.61	3.60	0.65	.003
Tracking promises about what people will do and achieve.	3.36	0.75	3.23	0.79	.02

Table 3: e-Learning Purposes with Significant Difference by Respondent's Role

Purpose	**Industry**						
	Academic/ Education (n=123)		**Corporate** (n=605)		**Government or Military** (n=65)		
	Mean	SD	Mean	SD	Mean	SD	sig
Working well on teams.	3.43*	0.62	3.17*	0.66	3.27	0.61	*.001
Reducing errors.	3.29*	0.70	3.48*	0.64	3.41	0.73	*.02
Becoming fluent about our products and services.	3.48*	0.74	3.68*	0.59	3.59	0.60	*.02
Working well with global colleagues.	3.47*+	0.82	3.25*	0.92	3.10+	1.08	*.04 +.05

Table 4: e-Learning Purposes with Significant Difference by Respondent's Organization Type

IV. DISCUSSION

A. Potential is Recognized

Practitioners give e-learning an encouraging nod. E-learning was perceived as possessing potential for each and every purpose, with all but one receiving ratings above 3.0 (some potential), and only passion for the work, at 2.98, dipping a tad below that mark. While respondents were not very enthusiastic about e-learning for workplace development, they were favorably inclined.

What they were not was adventurous. Defined, familiar programs led the list of favored outcomes. The top rated item is an example—the important matter of staying up-to-date on products and services. Interestingly, "leaders" were statistically significantly more likely to welcome e-learning for new products (mean=3.73), when compared to "non-leader" responders (mean=3.60). This was one of only two items that revealed significant differences between "leaders" and their more tactical colleagues.

Respondents were more likely to see the possibilities in e-learning when the nature of the initiative is operational. Thus, soft skills were less favored than managing projects or standardizing efforts. The softer side was among the lowest rated (increasing passion, working well on teams, understanding culture), reflecting doubts about the effectiveness of technology for developing people skills and habits.

Workplace learning practitioners and their managers inclined towards those practices associated with knowledge management. As organizations struggle to achieve more with less and reflect on the retirement of Baby Boomers, it is not surprising that they reach for means to capture and distribute great ideas and practices, rated sixth and second, respectively.

B. Like-minded

In their ratings, respondents were often like-minded. Relatively low standard deviations on the highest ranked uses are one indication of consensus among practitioners. The lack of significant differences based on organization type or role within the organization further illustrated the consensus. Taken together, these consistent findings suggest shared beliefs about the suitability of e-learning.

C. Academics Stand Apart

In just a few intriguing ways, academics differed from 88% of the sample not affiliated with universities or colleges. They were significantly more inclined to exploit e-learning as a means to work with global colleagues and to facilitate teams. Perhaps it is the nature of academia, where individuals are far-flung and affiliations by discipline tend to be stronger than by institution. Software engineers at Microsoft, Google, and Apple might hesitate to collaborate; concerns about competition temper collaboration. That is less the case for academics at MIT in Massachusetts, Stanford in California, Oxford in the United Kingdom, and Technion in Israel. Of no surprise is that academics did not plan to use e-learning to reduce errors and become more fluent about products and services. That is not what they do, lending credibility to the data and aggregated results.

D. Expanding the Definition of e-Learning

When we gathered data about the purposes to which e-learning might be applied, we simultaneously asked about the forms that e-learning takes today [16, 17]. Current practice is rather thin, leveraging only some of the possibilities, with personalization, post-class discussion, employee-generated content, e-coaching, and mobile learning only rarely in play. Without those strategies, without approaches that bring key lessons and support into the workplace, it is no surprise that respondents have a constrained view about what e-learning can do for them. Few veteran workplace learning professionals—and this sample was veteran—can envision any single face-to-face or online course with sufficient effectiveness to influence attitudes, teaming and culture.

V. CONCLUSION

According to respondents, workplace learning professionals should not devote themselves entirely to e-learning. That is not their proper job. They are more appropriately concerned about outcomes and results. For training professionals, e-learning is a means to their ends, and when considered in that light, this study reveals that they see many applications for technology.

But they do not favor all outcomes equally or enthusiastically. When it comes to the softer side of training, they hesitate to use e-learning for unclear goals or for objectives that are especially difficult to achieve. That conclusion raises an important question for the training industry. Is it e-learning that they doubt lacks the capacity to build passion, teaming, and effective work in unfamiliar settings? Do their doubts extend to the ability of the training and development enterprise to influence complex human behavior and organizations?

VI. ABOUT THE AUTHORS

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