410 Reducing Risk Through Online Compliance Training

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Faculty Biographies

Everett L. Bake

Everett L. Bake is the senior safety/compliance training specialist for Farmland Industries, Inc. Mr. Bake is a member of the legal division located at the Farmland World Headquarters in Kansas City, Missouri. His responsibilities include safety and compliance training needs assessment, training development and deployment, and authoring web and CD based training programs.

Prior to joining Farmland, Mr. Bake was a project manager for Pan Educational Institute(PEI). While at PEI, he authored and served as primary trainer for the Chemical Hazards and Environmental Management in Schools (CHEMIS), a national systems management program for the U.S. Fire Administration, FEMA. His work at PEI also involved multiple grant projects developing online educational models to demonstrate the feasibility and use of the internet as an educational tool. This work was done in collaboration with the University of Illinois, Urbana, Champaign, National Center for SuperComputing Activities (NCSA).

Mr. Bake's commitment to safety and his community are indicated by his continued service to the local Fire District for over 25 years. He has served the district in many capacities, including training officer, senior firefighter, rescue squad commander, hazmat coordinator/consultant, and elected member of the board of directors.

Mr. Bake received his MPA from Central Missouri State University, where he also served as an adjunct faculty member in the Safety Science and Technology Department for seven years. Mr. Bake also received a BS degree and is a 30 year career educator.

John A. Ricca

John A. Ricca represents employers in employment-related matters. He focuses on litigation prevention activities such as management and employee training, investigating internal employee complaints, human resources audits, individual executive harassment/EEO coaching, and responding to discrimination charges and attorney demand letters.

Mr. Ricca was assistant vice president and chief counsel-human resources for Fireman's Fund Insurance Company in Novato, California for 15 years. Prior to that, he was chief labor counsel for General Foods Corporation, human resources attorney for GTE Corporation, and a senior associate with a San Francisco employment law firm.

He is a member of the Practising Law Institute California advisory committee, the labor and employment law advisory committee, and the Commerce Clearing House Human Resources Management advisory board. He is also a member of the board of directors of the Marin Community Clinic in Greenbrae, California, which provides primary health services to the uninsured and underinsured.

After receiving a BA from the University of Michigan, Mr. Ricca attended New York University Graduate School of Arts and Sciences. He obtained his law degree from Seton Hall University School of Law, where he received the American Jurisprudence award in labor law.

Paul Salvatore

Paul Salvatore is a partner in Proskauer Rose LLP's labor and employment law department, representing employers in employment law and litigation, as well as union/management relations and collective bargaining. He handles all types of employment litigation and arbitration and provides advice and guidance to clients, counseling employers on how to avoid litigation and achieve their employee relations objectives through such techniques as proactive human resources policies and alternative dispute resolution.

Among other groups he works with, Mr. Salvatore serves as a speaker for the Society for Human Resource Management (SHRM), as well as cochair of its Employee and Labor Relations Committee. He also serves as an arbitrator for the American Arbitration Association.

Mr. Salvatore is an honors graduate of Cornell University's School of Industrial and Labor Relations (ILR) and The Cornell Law School. He presently serves as immediate past president of the ILR Alumni Association, as a member of ILR's Advisory Council, and has been elected by Cornell's board of trustees to the University Council.

David J. Simon

David J. Simon is an attorney and multimedia developer who founded WeComply, Inc. WeComply offers customizable, personalized, online compliance-training programs on a wide range of law-related topics for corporate and government employees.

Prior to founding WeComply, Mr. Simon was the director of research and development at Practising Law Institute, where he produced and programmed the award-winning *Interactive Courtroom* CD-ROM series, created the first MCLE-approved online audio and video legal-training programs in the country, and was honored as a "Top 100 Multimedia Producer" for 1998—99.

Mr. Simon is a graduate of the University of California—Davis School of Law, where he was editor in chief of the law review. After law school he clerked for The Honorable Harry Pregerson on the U.S. Court of Appeals for the Ninth Circuit.

Online Training: Guarding Against Employer Liability in Discrimination and Harassment Claims
By: Paul Salvatore and Katharine H. Parker[1]

A male manager at a nationwide auto repair shop hired a female assistant manager. During her first week of work, the manager began commenting on his assistant's physical attributes. Over time his comments became more explicit, including discussions about pornographic movies and different sexual techniques. Incredibly, he made these comments after being trained about the company's zero-tolerance anti-harassment policy. Ultimately the female assistant manager resigned without first lodging an internal complaint, claiming constructive discharge due to a sexually hostile work environment. She then brought a federal court action alleging sexual harassment.[2] However, the company was able to assert a defense that it had acted in good faith to avoid and address this kind of misconduct by pointing in part to its training program. The court accepted the company's defense and the company escaped liability.[3]

Until recently the company may have been found liable for its manager's misconduct. This case teaches that even if individual managers do not abide by a company's policy, the fact that an employer educated its employees about is policies can deflect a finding of liability. Thus, training is more important than ever.

The good news: training is now at your fingertips ready to be immediately implemented for a reasonable cost through the Internet. Online management and employee training programs are the latest tools employers can use in an effective plan to promote their anti-discrimination policies and train their employees.

Long gone are the scheduling impediments to training. Online programs allow individual managers to train when it is convenient for their schedule within a time frame established by the company. Further, online training adjusts to the knowledge and skill set of the trainee.

Managers who are familiar with the company's policies and their legal obligations typically complete training in less time than ones who are less familiar with them.

The best online programs are easily adapted to each company. WeComply.com, for example, has partnered with Proskauer Rose LLP – which has one of the nation's preeminent employment and labor law practices – in creating a variety of top of the online management training programs. Its anti-harassment training program incorporates each company's employment policies into the program. Thus, managers and employees receive information about their company's specific policies, not just generalized information about equal employment laws.

The format of the WeComply.com program consists of a 30-minute informational portion followed by hypothetical employment scenarios designed to test the knowledge the trainee has gained. A "passing" score demonstrates that the trainee comprehended the major points from the session, after which the trainee receives a certificate of completion. The certificate then can be maintained in the employee's file as proof of completion of the training. This individualized testing ensures that all trainees fully comprehend the company's policies and their obligations. Regardless of the program chosen, individualized testing should be a component.

The fees for on-line training typically range around $15-30 per employee. This makes on-line training extremely cost-effective. Additionally, the flexibility associated twith the training helps prevent many lost hours of employee productivity for all levels of employees.

In short, "The new wave of online training is the easiest way for employers to avoid, or at the very least minimize, their liability when faced with claims of discrimination and harassment," says David Simon of WeComply.com.

The development and rapid rise of online training has occurred due to two concurrent forces: improved technology and three U.S. Supreme Court Rulings that make training a corporate imperative. The first two U.S. Supreme Court cases, *Faragher v. City of Boca Raton* and *Burlington Mills v. Ellerth*,[4] established an affirmative defense to an employee's claim of hostile environment sexual harassment by a supervisor when no tangible employment action is taken. The two prongs of the defense are that (1) the employer must have exercised reasonable care to prevent and promptly correct any sexually harassing behavior and (2) the employee must have unreasonably failed to take advantage of the complaint procedures provided by the employer or to avoid harm otherwise.[5]

Numerous courts have found that employers who train their employees about the equal employment laws and the company's anti-discrimination policies and complaint procedures can meet the first prong of this defense.[6]

The third U.S. Supreme Court case, *Kolstad v. American Dental Association*,[7] established a defense to an employee's claim for punitive damages, frequently one of the biggest areas of exposure for employers faced with discrimination and harassment suits. Under *Kolstad* and its progeny, numerous employers have avoided liability because they could show that they acted in good faith to comply with the law by implementing and training managers on their anti-discrimination and anti-harassment policies.[8]

In order to establish either a defense to liability or to punitive damages, however, the training program must convey all applicable legal concepts and otherwise be substantively appropriate, and it must be implemented properly.

Programs such as WeComply.com already contain the legally necessary substantive content and allow for immediate and cost-effective implementation. Regardless of what online

training product is ultimately used, employers should keep in mind the following rules when selecting an online program.

Content:

A training program should contain an overview of equal employment laws and the employer's own anti-discrimination and anti-harassment policies. It should also reaffirm the employer's commitment to abide by the law and provide specific definitions of unacceptable behavior. In addition, training should include an explanation of the procedures for reporting possible violations of policy and for investigating those reports. Programs like WeComply.com that contain a comprehension test on the topics of the training seminar give employers added insurance that their managers understood both the information presented during training and the legal consequences of noncompliance.

Implementation:

An anti-harassment or anti-discrimination policy will not help avoid liability or punitive damages if the policy is not implemented correctly. Indeed, the Seventh Circuit Court of Appeals in a case against the Export Packaging Company recently upheld a large punitive damages award against an employer that did not circulate its policy. The Court stated: "The mere creation of a sexual harassment policy will not shield a company from its responsibility to actively prevent sexual harassment in the workplace. The policy itself should provide for a meaningful process whereby an employee can express his or her concerns regarding an individual within a working environment"[9], and employees must be informed of the grievance process.

Thus, training should be mandatory for all employees. A company should create and support a timeline for training, keep documentation of all training conducted and retrain managers periodically.

TIPS FOR MAXIMIZING BENEFITS OF ONLINE TRAINING

> - Select an online program that is substantively complete and meets the test articulated by the Supreme Court for establishing an affirmative defense.
> - Have the company anti-harassment and anti-discrimination policy and training requirement delivered by the CEO, Senior Vice President of Human Resources or other high-level manager.
> - Make training *mandatory*.
> - Give a schedule for completing the training.
> - Give adequate instructions for accessing the online program.
> - Follow up to ensure that all managers have participated in the training.
> - Keep a record of all training conducted.
> - Reissue policies and retrain regularly.

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[1] Paul Salvatore and Katharine H. Parker are a partners in the Labor and Employment Department at Proskauer Rose LLP. The authors wish to thank Jennifer Duberstein, a summer associate with the firm for her assistance with this article.

[2] *See Shaw v. AutoZone, Inc.,* 180 F.3d 806 (7th Cir. 1999).

[3] *See Burlington Mills v. Ellerth*, 524 U.S. 742 (U.S. 1998); *Faragher v. City of Boca Raton*, 524 U.S. 775 (U.S. 1998); *See also Shaw*, *supra* note 2.

[4] *Ellerth*, *supra* note 3; *Faragher*, *supra* note 3.

[5] *Ellerth*, *supra* note 3.

[6] *See Masson v. School Bd. of Dade County*, 1999 WL 115146 (S.D. Fla. Feb. 19, 1999)(holding that training and workshops sessions for supervisors concerning federal and state law that prohibit sexual harassment, in addition to other preventative measures, satisfy the first prong of the affirmative defense).

[7] *See Kolstad v. American Dental Association*, 1999 U.S. Lexis 4372 (U.S. 1999).

[8] *See Fuller v. Caterpillar Inc.,* 124 F.Supp.2d 610 (N.D. Ill. 2000) (holding the defendant not liable because the defendant had a long-standing anti-discrimination policy that was implemented through an eight-hour training session); *Woodward v. Ameritech Mobile Communications Inc.*, 2000 U.S. Dist. LEXIS 7133 (S.D. In. 2000) (holding the defendant not liable for punitive damages because the defendant trained its employees about the anti-harassment policy); *Cooke v. Stefani*, 2001 U.S. app. LEXIS 9223 (7th Cir. 2001) (holding the defendant not liable for punitive damages because there is nothing more the defendant could have done besides issuing the general policy and training to ensure compliance with the anti-harassment policy); *Dobrich v. General Dynamics Corp.*, 106 F.Supp.2d 386 (D. Conn. 2000) (holding the defendant not liable for punitive damages because the defendant made good faith efforts to enforce sexual harassment polity by requiring training); *Jaudon v. Elder Health, Inc.*, 125 F. Supp.2d 153 (D. Md. 2000) (upholding summary judgment for defendant on punitive damages claim because there was no evidence that defendant did not engage in good faith efforts to comply with Title VII).

[9] *See Gentry v. Export Packaging Company,* 238 F.3d 842, 847(7th Cir. 2001) (holding that instructions to the jury regarding punitive damages were acceptable because the anti-harassment policy was not implemented in good faith). *See also Harbison v. Pilot Air Freight,* 2001 U.S. Dist. LEXIS 5024(S.D. In. 2001)(holding that a sexual harassment policy by itself will not shield a company from liability in punitive damages situations).

COMPUTER-BASED TRAINING EVALUATOR

Category	Requirement	Priority	Vendor1	Vendor2	Vendor3
Short List	Self-paced training with business ethics/compliance content	Must Have			
Short List	Web-based delivery with no embedded objects, video streaming, or other performance inhibitors, not a show stopper for an ASP solution	Must Have			
Short List	Ability to verify list of employees that have completed the training	Must Have			
Short List	Secured environment of Company information (user names, scores…)	Must Have			
Short List	Ability to specify which employees should take training	Must Have			
Short List	Ability to handle 35,000 employees concurrently	Must Have			
Short List	Compliance with Company's environment standards (including ability to run in load-balanced environment). Not an issue for ASP	Must Have			
Short List	Can test employee's learning and record results	Must Have			
Short List	Can deploy by June 1	Must Have			
Short List	Adherence to budget	Must Have			
User Functions	Self-paced - user can stop and restart in same place	Must Have			
User Functions	ability to record results - email confirmation desired	Must Have			
User Functions	ability to record user skill level at least pass/fail, ultimately actual score	Strongly Desired			
User Functions	ability to produce reports from the application	Strongly Desired			
User Functions	menu-driven interface (user options are obvious on the panels and clear as to how to maneuver)	Must Have			
System Access	ability to be used via Company intranet (browser based)	Must Have			
System Access	Presentation portion of tool has secure platform access based on user access to Company network, keeping track of the NT login of the user	Strongly Desired			
System Access	Author portion of tool has secure platform access to authorized users using NT authentication	Strongly Desired			

User Functions	multi-lingual capability	Nice to Have			
System Access	ability to run across Windows platforms (95, 97, 2000, NT)	Must Have			
User Functions	capability to update new content on an on-going basis	Must Have			
User Functions	ease of delivery to employees - browser based	Must Have			
User Functions	avoids delays while taking training - slow response due to bandwidth, streaming etc are problems that need to be avoided	Must Have			
System Access	System should be accessible on a global basis	Must Have			
System Access	The number of simultaneous users should not degrade performance to an unacceptable level (i.e., max 10 secs, preferred under 5 secs, response time)	Must Have			
User Functions	The system database will handle several modules that may be created and stored (should depend upon the amount of server space available instead).	Nice to Have			
User Functions	The participant can be guided to the particular module to be used at that time for that training roll-out, rather than a menu of all available modules	Nice to Have			
User Functions	The module scoring (or actual module taken) can be driven by the job function/level of the employee taking the module	Nice to Have			
Data Interfaces	The training results including employee name or id & scores can be captured in HR data systems for further reporting & usage (beyond the "canned" reports available within the software database itself)	Nice to Have			
Data Interfaces	The participant's job grade/title/or function can be used to validate which version of a given module should be taken (i.e., managers are guided to manager "versions" of the Compliance training module).	Nice to Have			

User Functions	The tests will be multiple choice (as opposed to free-form answer). True/False questions are understood to be multiple choice with two choices. There is no specified limit on the number of answers that may be associated with a question (up to 10 or 20)	Must Have			
User Functions	The answers will display in a randomized order from one test session to the next.	Nice to Have			
User Functions	A question may have a graphic image associated with it that will display along with the question and answers. The graphic will be a fixed size in all pages. The size will be determined according to page design standards.	Strongly Desired			
User Functions	A question may have a URL associated with it that will display along with the question and answers. An example of the use of this URL would be to point to a reference document containing information pertinent to the question.	Must Have			
User Functions	The ability to have one question per web page/panel will be available; if desired multiple questions may be present on a given page.	Nice to Have			
User Functions	Users must log in to the system. The system will maintain a record of all tests taken or attempted.	Must Have			
User Functions	If a user does not complete a test, the test will resume at the same page as when the user exited the application or was timed out of the system.	Strongly Desired			
User Functions	Timeouts will be based on the current ASP standard default. After the default time limit of no activity, the user must relogin to the system, but will resume at the previous stopping place.	Strongly Desired			
User Functions	A user may retake a test an unlimited number of times.	Strongly Desired			

User Functions	A record will be maintained of each attempt at any test. This will record the users guide id, the test id, the question key (last question attempted), whether the test was passed (yes, no, incomplete, updated), the test category, the date the test was at	Nice to Have			
User Functions	The menu of modules can be secured to show only certain modules available to certain individuals or groups of individuals	Nice to Have			
User Functions	After an initial login, and if there are no tests in progress, the user will be able to select from a list of available testing subjects. Initially there will be no security on any tests, all tests are available to all users.	Nice to Have			
User Functions	Users can select an option for any given test that will display a long description of the test.	Nice to Have			
User Functions	For the Corporate Compliance Testing selection, an initial screen will query whether the employee is a) US or non-US and b) management or non-management. The answer will be used to determine the specific test to be administered (test category).	Nice to Have			
User Functions	It will be an option for any defined test whether to display an answer review immediately following a user answering any given question. The answer review will list the question, and answers, points associated with each answer and discussion text on each	Strongly Desired			
User Functions	When a test is completed, the application will display the users total score on the test and whether the user passed. A email to the user is big plus.	Nice to Have			
User Functions	Context sensitive help will be available from any page using a help function	Must Have			
System Administration	System Administration of tests will be browser based.	Strongly Desired			

System Administration	The test administrator has the capability to define a new test	Must Have			
System Administration	A test will be marked as inactive until the test administrator has completed creation of the test in the system and marks it as active. Only active tests display in the user test selection screen	Must Have			
System Administration	The administrator will be able to edit the module content at any time	Must Have			
System Administration	The test administrator will define the passing score for any given test.	Must Have			
System Administration	The administrator will be able to enter a question, the category of the question, associated answers, point value for each answer, discussion text associated with an answer, the URL of an associated graphic, and the URL of an associated reference	Strongly Desired			
System Administration	The administrator will be able to flag a question as "required."	Nice to Have			
System Administration	If the number of questions entered for a test exceed the number of questions defined during test setup, the test questions will be randomly selected except that questions flagged as "required" will be guaranteed to be delivered.	Nice to Have			
System Administration	If the number of questions entered as "required" exceed the number of questions defined for the test during test setup, the test administrator will be notified of the error.	Nice to Have			
System Administration	Within a test, questions will be grouped by question category. Within a category, questions will display randomly or, if the administrator has assigned a question number, questions will display in a category in question number order.	Nice to Have			
System Administration	Administrative access is gained by logging in as an administrator in the user login screen.	Strongly Desired			

System Administration	The system will record a count of how many times a specific answer has been selected. (question/answer trends)	Nice to Have			
System Administration	The system will record "last modify" dates and times for each test, question and answer. The count value for an answer will be based on "first time" data.	Strongly Desired			
Reporting & Data Retrieval	The system will be able to retrieve a report showing all employees who have passed a specific test within a specific time period.	Must Have			
Reporting & Data Retrieval	The application will generate a report showing all: active and inactive tests, their names and long descriptions, owner and last modified date, last date a test was administered to a user	Strongly Desired			
Reporting & Data Retrieval	The application will generate a report showing all: total times test was taken, passing score, total times test was passed, total times test was failed, total incomplete	Strongly Desired			
System Administration	Modules can be deleted or marked "inactive" and archived by the administrator.	Must Have			
System Administration	The administrator will have the ability to replace the user login screen with an "out of service" screen for maintenance. The login fields will remain on the "out of service" page, but will only accept logins from the administrator.	Strongly Desired			
System Constraints	To minimize network usage, any individual question page, including associated graphics, will meet Company size limitations.	Must Have			
System Constraints	The system will run on Microsoft NT 4.0 (or higher) using IIS 3.0 (or higher) and SQL Server 7.0 (or higher). The client browser will be IE 3.0 (or higher). (Internal requirement - not for ASP)	Must Have			

System Constraints	The application is written in currently-acceptable programming language (I.e., Java, VB, C++ as opposed to COBOL or other proprietary language). (Internal requirement - not for ASP)	Strongly Desired			
System Interfaces	Information must be available as to how many have completed the module, passed the module, and who has not taken and passed the module (this may require an interface to HR system or training track, etc. with reporting available back)	Must Have			
User Interfaces	The system shall use an interface delivered through Microsoft Internet Explorer version 4.0 and above. The delivery to the desktop should be pure HTML.	Must Have			
User Interfaces	The GUI should follow Company standards for inline web pages.	Strongly Desired			
User Interfaces	The system will have a help facility accessible from all screens that will instruct the user on how to proceed through the application. The help information will be HTML and delivered through the Internet Explorer browser.	Must Have			
Hardware Interfaces	While the primary delivery mechanism for the module will be via the Company intranet, another method will be available for the incidental few users who may not have machines not connected to the network/intranet.	Nice to Have			
System Constraints	The system should not require additional memory on the client above that used to implement Windows and the IE browser. The system will not store information on the client hard disk beyond what the browser automatically stores in the client cache.	Strongly Desired			

Operations	The testing will be initiated by the user as required. If the user has begun a test and exits from the browser, the test will resume at the same place the user left off. Current scoring information will be maintained.	Strongly Desired			
Operations	Employees will enter their cost center, email and employee id before taking the module.	Must Have			
Operations	Employee Ids will be verified against HR data prior to the user taking the module	Nice to Have			
Operations	Employee id data will be captured and available via reports from the system, even if not verified against HR data	Strongly Desired			
Operations	The system will be available world-wide 24 hours a day, 7 days a week, except for maintenance periods pre-arranged through the change management process. If the application is down for maintenance, the administrator will have a function available to switch	Strongly Desired			
System Constraints	Test results data should be available for manipulation & reporting on an on-going basis.	Must Have			
System Constraints	Test results data should be stored in a relational database format.	Strongly Desired			

Assessment Criteria/Description

1. **Customization -** The extent to which The Company can customize the format and content of the system (e.g., user interface, substantive content, and testing).

2. **Verification/Tracking -** The System's capability to verify and track employee training.

3. **Pricing (Economic Feasibility) -** The range of pricing options provided by the vendor.

4. **Access** - How its target users can access the system.

5. **Integration with other systems -** The system's ability to integrate with other Company systems.

6. **Collective Feedback -** Ability of the system to capture upstream communications, a key element of COSO Internal Control standards and compliance effectiveness.

7. **Quality of Modules (Content) -** Quality of module content and source of content.

8. **Degree of Interaction (user-friendly) -** The training module should be understandable, foster interactive learning and be easy to navigate.

http://www.namvu.com/roia.html

A Different Way to View the Return on Investment (ROI) in e-Learning
By John Moran, CEO, GP e-Learning Technologies, Inc.

In communicating with learning professionals tasked with determining the ROI for an e-Learning investment, the conversation is generally within the context of, "If I replace or supplement traditional classroom training with an e-Learning solution, how much will I save?" That logic is slightly flawed; there are many non-cost related reasons to select and deploy e-Learning. Factors like:
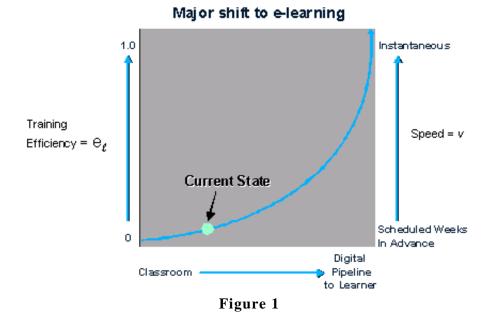
- Reach - reaching more of my company's learner population
- Consistent Message - delivering a common message to all learners
- Configuration Management - updating courses easily
- Flexibility - creating new courses by connecting knowledge chunks from existing courses
- Instructional Design - capturing corporate knowledge because it is designed with more content apparent to the learner (in the classroom, much of the content resides in the instructor's "head")

Despite the above factors, proving an e-Learning business case generally means demonstrating reduced cost. The comparative cost analysis between e-Learning and its traditional classroom counterpart appears straightforward with very quantifiable variables. The basic components of cost are shown in Table 1 below.

Classroom Deployment	**e-Learning Deployment**

- Facility Costs
 	
   ○ Room rental or overhead allocation
   ○ Refreshments
   ○ Training materials; Teaching aids
 	
- Instructor Costs
 	
   ○ Instructor salary and benefits cost (if internal)
   ○ Instructor fee (if contracted)
   ○ Travel and living
 	
   ○ Learner Costs
   ○ Time away from workplace; i.e., cost of replacement workers or equivalent
   ○ Travel and living
 	
- Course Development Costs
	- Incremental Desktop Computer Costs (if any)
	- Web-enabled LMS costs (if any)
	- Course Development Costs
	- Learner Costs
	
	   ○ Time away from the workplace (if any)
	
	- MIS Support
	- Hosting Costs (if any)

Table 1 - Cost Components

However, all of the significant cost factors are not accounted for in Table 1. There are two other factors that have a first order impact ROI. They are learning efficiency (el) and speed (v). Consider Figure 1 below where the graph moves along the "x" axis from the classroom-learning environment to an on-line learning environment.

Figure 1

If learning is defined as knowledge or skill acquired by instruction or study, learning efficiency can be defined as the sum of the knowledge and skills transferred that specifically improve job performance, divided by the sum of all information transferred during the learning process. Knowledge and skills that improve job performance will be referred to as "useful." In short:

$$e_\ell = \text{useful knowledge and skills / all information transferred}$$

Perfect learning efficiency is achieved at 1.0. At a 1.0 learning efficiency, all of the information transferred leads to useful knowledge and skills. Most classroom events are highly inefficient within the context of the learning efficiency equation. The factors that contribute are:

- Learner populations have different skill levels, yet classroom events are designed assuming a target skill level. Learners with more or less mastery than the target audience will have lower learning efficiencies.
- Once the learner has arrived at the classroom, it is too late to conclude the course does not apply to his or her job.
- A course (classroom or on-line) will contain chunks of learning that are not useful.

A personal example will help illustrate the frustrating experience in a low el classroom environment. A friend of mine, with a strong background in Finance, enrolled in a one-day classroom event entitled "Advanced Financial Principles." The first four hours of the course covered very basic financial principles he had mastered long ago. These hours were non-useful. One hour on the topic of "company valuation" was "useful". The other three hours on advanced principles could not be used in his present job. In this instance, learning efficiency calculates to 1/8 or 12.5%; i.e., only one hour in eight transferred knowledge used to improve his job performance.

Contrast this classroom event with a properly designed on-line course. With minimal navigation skills, my friend skips the non-useful hours, and focuses exclusively on the one hour of "useful" learning. Now his learning efficiency = 100%. An added bonus is the e-Learning compression, which studies show takes place at about a 2:1 ratio. In other words, the "useful" skills and knowledge transferred in one hour of classroom delivery can be effectively transferred in 1⁄2 hour on-line.

The second element, speed (v), is a concept that is relatively simple and well understood. Consider a factory floor operator named Mary working in a plant that produces potato chips. Almost six months ago, Mary attended a course to learn how to identify "out-of-spec" potato chips, the root cause of the problem, and how to correct the problem quickly. Today, however, she is producing out-of-spec chips and can't remember the appropriate protocol to identify and correct the problem. Each moment that goes by increases wastage and reduces productivity. Mary

needs the course knowledge now, not six months ago. If the course is on-line and accessible, Mary can quickly identify the appropriate module and get help.

Only on-line learning allows access to knowledge at exactly the point in time it is needed. This increase in speed actually increases the value of the course content because of its improved availability to the learner. Speed, in this case, clearly has value and a significant impact on bottom line performance.

If shop floor performance is too far away from your comfort zone, think about the impact v has upon a field sales force where new products are constantly being introduced. The sales force needs product knowledge now - they can't wait for the next scheduled classroom event.

So, the next time you're tasked to produce an ROI justification for e-Learning, don't forget el and *v*. They can produce the most compelling argument of all.

Excerpted from "Is Distance Learning Worth It?
Helping to Determine the Costs of Online Courses"
By Brian M. Morgan, Marshall University

Costs Involved in Developing and Teaching Online Courses

There are some real difficulties in attempting to determine the costs of an uncertain endeavor. Bates attempts to answer the administrative question "why can't we just compare the costs for online education to the traditional courses offered at our University?" (Bates, 2000). If it were only that easy. It would have made this writing much easier. Bates (2000) shows that there are incredible differences between costs for traditional courses as opposed to technology-based teaching. Everyone has seen that the investment in technology is very necessary, but also very expensive. Often, the true cost of traditional education is hidden because the costs of developing courses is not tracked or budgeted. Instructors are expected to prepare their material. The main difference lies in the fact that educational technology equipment and support costs are often under budgeted because their importance is not understood or because such costs conflict with other priorities. To truly get an idea of what it will cost an institution, a comparison of the costs of different modes of delivery into a quantifiable number is necessary. Inglis (1999) shows that the easiest way to do this is to determine the average cost per student. Use the accompanying site (http://webpages.marshall.edu/~morganI6/onlinecosts/) to estimate the cost for online courses and then compare the results to traditional courses, or other forms of distance education at an institution.

<u>Determining Categories for Costs</u>

Bates states that to find the underlying cause of costs, they must first be broken into distinctive categories. Cost factors that are being investigated include: capital and recurrent costs, production and delivery costs, and fixed and variable costs. Capital costs are costs for infrastructure, equipment and materials necessary for the offering of courses. Recurrent costs are costs that occur on an ongoing basis, such as information technology support. Production costs are costs incurred during the development of the courses while delivery costs are costs

associated with teaching a course. Fixed costs are costs that do not change as the number of students change while variable costs change with the number of students enrolled (Bartolic-Zlomislic & Bates, 1999). For technology-based education, one can see that fixed costs are high, but variable costs are low in comparison to traditional courses.

After breaking down the categories, the task was to assign specific areas to categories. The areas that are of utmost importance are technology specific costs, support personnel costs, faculty development costs, administrative costs, hidden costs, costs of developing courses, and costs for teaching courses. An explanation of each of these areas follows. The web site located at http://webpages.marshall.edu/~morganl6/onlinecosts/ shows a break down for the estimated costs for an institution.

Technology Specific Costs

One of the largest cost hurdles in deciding to offer online courses is technology infrastructure. An institution must commit to building a proper information technology infrastructure to support online courses before offering the first course. What often happens is that costs are shifted when looking to invest in online courses either through other uses or through neglect. The most often ignored cost is bandwidth charges. Inglis (1999) shows that if an institution tries to require students to bear communication and computing costs as a way of reducing costs, this only shifts costs and does not reflect a savings. To find the underlying cause of what online courses will cost, all costs must be analyzed completely.

One of the worst things an institution can do is invest in technology thinking that it will immediately reduce other teaching costs. Technology usually adds to an institution's costs because of the support and time required to implement. Upon the realization of the expense and willingness to invest, one can hope to improve the quality of learning by making use of the interactive capabilities of newer web technologies. Cost implications come into play when looking at the time involved with accomplishing this goal. Inglis (1999) points out that it may take up to 100 hours of development time to create one hour of student material. The delivery of audio and video requires more bandwidth than simple text

or most graphics, which relates to higher costs.

In terms of technology needs, an institution must explore the acquisition of a powerful server to house their online courses. Often, an institution will purchase packaged software to serve online courses. When purchasing a server, it should be configured so that it is compatible with this online course delivery software and provide room for future growth. For costing purposes, you should amortize the cost of a server over a three-year period (lifespan of many computer systems) and assume that an investment of 10% of the cost of the machine each year for new equipment will be necessary.

If growth is planned, it is highly recommended that an institution invest in an online course delivery tool. Most software packages offer pre-built tools so faculty do not have to perform in-depth programming to offer conferencing tools, online tests, secured environments, etc. It is very important that the cost of this software be included in estimations. Traditional courses may use this type of software as well for enhanced offerings to their courses. Remembering that costs should be accounted for completely, the cost of software should be split to reflect costs for online courses and traditional courses.

Support Personnel Costs

Because of the uniqueness of this type of education, institutions will likely benefit from the hiring or assignment of an individual whose function is to manage online courses. This person could be seen as a business manager, one who would be in charge of the administrative side of the operation, but not have academic administration of the courses. Turoff(1997) suggests that all academic decisions be made on the same basis as they are for traditional courses. Typical duties of the business manager would be to assist students and faculty in getting started with online courses; if compensation is rewarded, completing paperwork necessary for compensation of faculty for development or teaching; conduct evaluations about the technology being used for online courses to assure that students and faculty understand what is taking place; generate administrative reports regarding registrations, retention, satisfaction, etc.; distribute any necessary student materials; and

coordinate between faculty working with online courses and support personnel on what problems are present.

In addition to the business manager, technology support individuals are key for the success of online courses. Faculty need to be provided with instructional technology and design support while developing their courses, as well as key technical support while the courses are being taught. Furthermore, students will undoubtedly make technical support calls due to a lack of understanding of the technology or the course material. Whatever they may call about, Turoff(1997) states that proper support should be provided to them to ensure they receive proper answers. Even though many of these positions may already exist at an institution, the costs for the portion of their time spent with online courses needs to be accounted for to properly cost out the endeavor.

Faculty Development Costs

Without the provision for faculty development with distance learning, the venture will undoubtedly fail. Faculty development needs not only to revolve around how to use the technology tools themselves, but also provide an understanding regarding how to teach using technology. This type of education often takes a total retooling of faculty to teach online. Turoff(1997) believes that it is often wise to select faculty who are thought to be able to adapt to the use of the underlying technology and to the facilitation, guidance, and leadership of online courses. When a course fails, it is often because either an instructor was forced into teaching the course and was not able to adapt to the role, or that proper development was not provided. One intriguing question that many ask is how does one attract faculty to the developmental sessions? Alternatively, how does an instructor become trained to teach in this environment? One school in Southern Nevada took the approach of paying faculty at a rate of $20 per hour for attending training during the summer when they have no contractual obligation. Analysis of results received from the faculty development survey, show that it is because of such incentives that they are able to attend development sessions and offer well-thought out and well-prepared courses.

Hidden Costs

What many schools neglect to consider when performing cost estimates are those costs that are deemed hidden costs. How does one value office space in trying to determine the cost of online courses? Many overlook this area because instructors would have an office space regardless of the type of course they are teaching. This is an important factor in considering costs. One must be aware that not all hidden costs will actually be tangible costs. As John Morrison noted (personal communication, December 5, 1998), one of the costs that can fit into this area would be the increase in network traffic because of online course material.

One of the most difficult tasks in trying to establish costs for distance learning is the determination of how to assign different costs. When trying to determine categories, many costs are forgotten. For example, we mentioned office space above, but Bates points out that there should be a provision for a computer system for the faculty member developing and teaching the courses, telephone services, heating and lighting, central finance office, president's office, and a host of other services, including registration, human resources, and so on. He recommends that there are three ways to account for such costs, often deemed as overheads (Bates, 2000):

- not to charge users
- to average overhead costs out over each operational functions using the service
- spread the costs over all operational units whether they use the service or not

How you decide to account for the costs are up to you but if you truly want to know the true cost of investing in technology, all costs need to be accounted for (Bates, 2000). Other overhead considerations include website construction and maintenance costs. The extent of these expenditures is sometimes hidden by policy or internal departmental costs and is often believed to be negligible.

Many areas must be considered when costing online courses. Institutions may be

easily deterred from even considering the endeavor because of the investment. Turoff(1997) shows that costing efforts are used, but can be startling if an effort is as much as 20% in the wrong direction. What is important to take into consideration is that even though the costs seem to be lofty in the beginning, Inglis (1999) argues that long-term costs are likely to be lower than other types of distance education.

Another hidden cost that must be considered is evaluation. Even though evaluation may be the responsibility of the business manager, there is much more to evaluation than determining the cost for the person administering the evaluation. After administering, evaluations must be tabulated and evaluated if they are to have meaning for future course offerings. In traditional courses, instructors can gain valuable feedback from students just by watching how they react in class. In the online environment, often the only method of feedback is through an evaluation process. Kibby (1999) shows that this can be accomplished through constant feedback with e-mail, web forms, or a course evaluation at the end of the course.

Costs of Developing Online Courses

This section will assist in viewing costs directly related to the development of online courses. By now, one understands that a large investment in technology and its associated training is essential for online courses to succeed. After investment and training, it is time to develop the courses. Development of courses cannot happen overnight. Additionally, there is not a set formula for how long it takes to develop an online course.

Several factors make it difficult to place a simple formula on determining the amount of time necessary to develop online courses. Patti Shank (personal communication, January 13, 2000) and Maggie McVay (personal communication, December 8, 1999) noted that some of the most influential factors in causing for varying development times include: resources available to the developer, technical abilities, pedagogical knowledge, availability of content, form of content (electronic or not), availability of developers and faculty, complexity of course, objectives and desired outcomes of course, type of instructional strategies necessary,

and programming needed. Instructional designers should be assigned to a developer. McVay pointed out that at one location, 120 hours are budgeted for the faculty developer, 120 hours for the instructional designer, and 40-60 hours for the web coding, totaling nearly 300 hours. What happens when this course makes use of complex multimedia material? What happens to the amount of time necessary to build the course? It most likely will increase dramatically. Who is to say that all courses will take 300 hours to develop?

For these reasons, the pricing of course development based on the number of hours to develop a course should not be considered. There are just too many unknown variables. Since the development of online courses is such a complex activity, some type of compensation structure should be in place for those who wish to develop. Methods for compensation include a flat stipend for development, release time for the developer, or contractual development. Still, many institutions are having faculty develop a course as part of their regular pay. All one has to do is review the results received from the developmental survey to see what developers have to say about this type of compensation method. Without a proper reward structure, faculty cannot see continuing to develop courses because of the complexity and time required.

Individuals are often worried about what it is going to cost to invest in the development of online courses. You must take into consideration that some, notably the capital equipment costs and the development costs of the course materials, are part of an investment that will be used over the life of a course. Other costs are expenses that will be incurred only once. Still others, and an incredibly smaller amount, are those that will occur yearly (Rumble, 1989). The accompanying web site helps to break down these figures and types of costs.

Costs of Teaching Online Courses

Many instructors fear that once an online course is developed, because of the investment in technology, they will not need to be kept around to teach the course. This is one reason instructors do not wish to participate in the development of distance learning

courses. Administrators need to stress that since computers are not smart enough to anticipate all questions, misunderstandings, and more importantly, original and creative outputs of students, faculty are needed to teach online courses.

As there is a need to study the costs of developing online courses, we must consider how instructors will be compensated for teaching as well. Downes (1998) argues that empirical data exists showing that online courses are more labor intensive than traditional classroom courses because of the use of technology. Online students interact to a greater degree than students in traditional courses. If an online course has not been developed properly, each student will expect more detailed and individualized comments causing instructors to spend larger amounts of time per student (Downes, 1998). Bates (2000) points out that courses need to be developed so that instructors can spend less time per student moderating discussion forums compared with the total time spent in classroom teaching.

Since many online courses require additional time of the instructor, one of the biggest questions on everyone's lips is "what is the number of students at which technology-based teaching becomes more cost-effective than face-to-face teaching?" Unfortunately, as Bates (2000) and others have noted, the answer is no one knows. Just as the case for the time it takes to develop a course, there is not a formula for determining the maximum number of students an online instructor can effectively manage.

Bates (2000) does note that proper student-teacher ratio is as much determined by educational philosophy, course design, and student numbers as by technology. For example, a course which offers didactic information will have little need for teacher-student interaction. This type of course is one that may have high development or fixed costs and low variable costs. Didactic courses could enroll a higher number of students. Other courses may have a high student-student and student-teacher interaction rate because of the way the course's content is delivered (Bates, 2000). This type of course could have lower development or fixed costs and high variable costs with fewer students enrolled.

There are several methods by which faculty can be compensated for teaching online courses. Methods include a flat stipend per course, stipend per student enrolled, or simply as

part of the faculty's regular pay. At Marshall University, nearly all instructors of online courses are paid a stipend per student enrolled, but these courses are taught as overloads. Administrators need to be aware of how instructors will be compensated and how many students each course will enroll, particularly because instructors often have to spend more time with an online course than the same course in a traditional setting.

Excerpted from "Is Distance Learning Worth It?
Helping to Determine the Costs of Online Courses"
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Ratings for each category- Yes/No and rate Superior (S), Expectable (E), Not Expectable (NE)

Criteria	Vendor I	Vendor 2	Vendor 3	Vendor Ranking	Comments
Course Criteria					
Compliance Courses available- (Sexual Harassment, Ethics, Ergonomics, Workplace Violence, etc)					
Development Courses available - (i.e. Coaching and Counseling, Perf Mgt, Stress Mgt, Interview Skills, etc					
Vendor maintains tracking of students and courses taken. Reporting Tools					
Courses are 20–40 minutes in length. Administrative quizzes and post tests.					
Courses are delivered in a manner to keep the interest of student and maximizes retention					
Information in courses can be book marked for future reference					
Capability to expand courses i.e. technical, orientation, delivery of company communications.					
Technical Requirements					
IT equipment is standard, not requiring significant IT expenditure					
Web Based through internet-vendor maintains servers					
Current & future technology use Proven Track Record, well established business, stability					

Cost	Vendor 1	Vendor 2	Vendor 3	Vendor Ranking	Comments
Vendors prices are cost effective. (cost per headcount vs. cost per course). List costs of each vendor					
Company Information					
Validation from current user as a reference					
Company is legitimate Vendor in the on line learning field and has long-term viability in Web based training.					
Future Plans (i.e., 5 year plan)					
Available Resources (technical, functional, etc.) to support applications					
Customer support is high					