



SAFETYNOW

A Division of Bongarde Media

WHAT TO LOOK FOR IN BETTER ONLINE SAFETY TRAINING

HOW DO YOU EVALUATE ONLINE SAFETY TRAINING
AND FIND WHAT'S RIGHT FOR YOUR BUSINESS?

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IN ADDITION TO THEIR SOCIAL COSTS, WORKPLACE INJURIES AND ILLNESSES HAVE A MAJOR IMPACT ON AN EMPLOYER'S BOTTOM LINE. IT HAS BEEN ESTIMATED THAT EMPLOYERS PAY ALMOST \$1 BILLION PER WEEK FOR DIRECT WORKERS' COMPENSATION COSTS ALONE.

WHAT ARE THE BENEFITS OF ONLINE SAFETY TRAINING?

Benefits for the Organization

By implementing online safety training at work, your organization stands to realize the following benefits:

- Increasing the safety training topics your organization can address (by using courses created by third parties)
- Improving the effectiveness of your safety training (by using safety

training material designed and developed by people with expertise in instructional design, training, and learning and development

- Creating a more scalable safety training solutions, allowing you to reach employees at different physical locations, on different shifts, etc.)
- Delivering a more standard safety

training message that's the same for every employee

- Saving more time for you to provide instructor-led safety training when that's necessary for skill building or for safety purposes
- Saving more time for you to perform other safety management tasks
- Lowering costs associated with safety training, especially costs associated with travel, taking employees away from job tasks, providing overtime for safety training completion, creating safety training, and tracking safety training
- Making it easier to get new and/or updated safety training materials to match changing needs, regulatory changes, etc.

- Using safety training not only for training but also for online job performance support delivered at the moment of need (via mobile devices)
- Cutting travel associated with safety training and thereby decreasing your organization's carbon footprint
- Creating a highly-effective blended learning solution for safety training

Benefits for the Employees

Here are just a few ways workers benefit when online safety training is added to the mix:

- Allows workers to complete assigned safety training at time that's most convenient for them
- Appeals to different learning

preferences

- Allows each worker to complete the same course at his/her own pace
- Allows worker to learn basic information from online courses, thereby saving more time for the worker to get valuable one-on-one training with a real person for skill building and safety-critical tasks
- Gives worker access not only to assigned training but also to additional training he/she can complete on an elective, optional basis

ACCORDING TO EBBINGHAUS' FORGETTING CURVE, WE CAN ESTIMATE THAT EMPLOYEES FORGET:

- **50% OF WHAT THEY
LEARN WITHIN ONE
HOUR**
- **80% OF WHAT THEY
LEARN AFTER TWO
DAYS**
- **90% OF WHAT THEY
LEARN AFTER 31 DAYS**

COMMON ASSUMPTIONS AND THE RESEARCH REGARDING THE EFFECTIVENESS OF ONLINE SAFETY TRAINING

REPRINTED FROM SAFETYTALKSIDEA.COM

There is a lot of research published that supports the effectiveness of online training. Oftentimes, assumptions are made that this type of training is not effective when it comes to teaching workplace safety principles. The paragraphs below break down the assumptions that may be held

which prevent companies from wanting to implement online training.

General Assumption #1: People simply like face-to-face safety training better.

What do trainees really think of online learning in general? If they're going to be dissatisfied with digital instruction/e-learning, it's safe to assume this method

of training will be unsuccessful. After all, it's rare that people retain information presented in a training exercise if they have a hard time staying engaged. In short, how satisfying do employees find online learning?

The difficulty with generalizing employee satisfaction with one medium versus another is that satisfaction is an individual matter that will depend largely upon personality, learning preferences, or even generational differences (Jones). For instance, the Mayo Clinic found that 80% of millennial medical students use some form of online platform as a primary source for instruction (Desy); the same may not be true for students of other generations.

But as far as generalizations go, research ranges from "no significant difference" to "slightly pro-digital" for satisfaction with online training compared to face-to-face

training.

Research that Debunks this Assumption

Researchers at the University of Illinois at Springfield tested the efficacy of three different delivery methods – face-to-face, blended, and online. Among other metrics, student levels of satisfaction regarding each type of instruction showed no significant difference (Larson), meaning the level of interest and satisfaction with course material was the same regardless of the method of training.

A research exercise conducted at Southwest Missouri State University found slightly more pro-digital (though still considered statistically insignificant) results. At the end of a semester, a group of students who'd received course instruction digitally or in-person were given a survey regarding satisfaction with the course.

Responses from the students in the experimental group (digital delivery) reported more positive feelings about the course than those who'd received instruction face-to-face (Wegner). Still, even these more positive responses were deemed statistically insignificant, as the margins were so thin.

Also in the "no significant difference" camp is Thomas L. Russell – an author, researcher, and educator. Russell wrote *The No Significant Difference Phenomenon*, a research bibliography containing over 350 research works that document no significant difference between modes of education delivery. This, of course, includes student satisfaction among delivery methods (see the online companion <http://nosignificantdifference.org> for more information.)

So, what's the bottom line here? Are employees satisfied by and interested

in online training? The objective truth is that there is no significant difference between employee satisfaction with training between different delivery methods. "Internet-based delivery of coursework appears to have no negative effect ... on students' perception of their learning" (Wegner). Online or face-to-face, employee satisfaction statistically remains the same.

General Assumption #2: People don't learn anything from online training.

So, our employees are statically just as interested in and satisfied with online training as they are with traditional instructor-led training. But do they actually learn anything from a computer, as opposed to interacting with an actual human being?

The research says yes; similar to satisfaction, student retention of course material presented online is statistically

the same as retention of course material presented in a traditional setting.

Research that Debunks this Assumption

The research group from Southwest Missouri State University assessed student retention of course material with identical 100-point exams. These exams were given to both the control group (students in a face-to-face setting) and the experimental group (students in an online setting.) The average test score between the two groups differed only by 1.07 points; and the ranges of test scores were nearly identical. Online students actually outscored the face-to-face students on the objective portion of the exam, and only fell short due to three short answer (more subjective) questions.

Despite this, the narrow margins rendered the differences statistically insignificant (Wegner), meaning both groups retained the same amount of information. Likewise, the research group from the University

of Illinois found no statistical difference in exam scores or final averages among students taking an introductory course in Management Information Systems; students involved in the study took the course either in person, online, or in a blended environment with both elements present.

A study conducted by Katherine Pang of the University of Texas sought to determine whether web-based training in the corporate sector was pedagogically equivalent to, and as effective as, a traditional classroom setting. The study included a wide range of participants in the corporate sector, from ages 21 to 51, with a range of educational backgrounds and positions within their organizations.

One group was instructed by a live trainer, and the other with videos and web-based learning. Two tests were distributed to both groups upon completion of the course;

one focused on perception and opinion of the course delivery methods, and the other was an objective multiple-choice exam derived from the course material.

The results from the multiple-choice exam showed that "knowledge gains were not only evident in both groups but slightly higher among the web-based learners" (Pang). Pang's research concludes that "live" training is in no way pedagogically superior or more effective than online training.

In a meta-analysis of online learning studies conducted by the U.S. Department of Education, the DoE found that "students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction" (United States Department of Education), though the DoE does admit elements other than delivery method may have been at play.

The analysis also states that blended (combining instructor-led classroom exercises with online instruction) and purely digital learning resulted in similar learning outcomes; meaning there were no significant differences in retention between students in a purely online setting and those who also had an in-person instructor.

So, do employees actually learn anything from online training, compared to traditional classroom training? The empirical data asserts: yes.

ABOUT THE AUTHOR: Sierra Morris resides in Fort Polk, LA with her husband and two dogs. Still relatively new to the OSH world, Morris seeks to make sense of occupational safety and health issues through a lens of behavioral and social psychology.



SAFETY SHOULD
NEVER BE A PRIORITY.
IT SHOULD BE A
PRECONDITION.



Paul O'Neill

FOUR BENEFITS OF USING ONLINE SAFETY TRAINING IN YOUR WORKPLACE

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Now that we have empirical evidence to back up the claim that online training is effective and a viable means for instruction, we can look at some more subjective reasons why online training is a suitable option.

Online Training is Arguably More Convenient

Some companies, due to the nature of their work, may have hundreds of employees scattered across the continental United States, or perhaps even in other countries. This presents a logistical issue when it comes to training. I have personally worked for a company that had employees scattered from Texas to Florida to North Carolina, and training them each year was an immense hassle.

The company preferred instructor-led training, which meant that employees had to be brought in to the central location whenever their training was due, or they would have to personally send an instructor to their location to train them. An answer to this could be hiring instructors local to the satellite location, but this presents an issue in uniformity and standardization among the workforce.

Using an online training curriculum will see that training courses are readily available anywhere, anytime, anyplace, and you will know for certain the topics you want to be covered will be covered, without the hassle of having to vet multiple companies.

Allows Trainees to Work at Their Own Pace and Understanding

The typical workplace will have employees with extremely varied educational

backgrounds, from GEDs to master's degrees. Oftentimes, in my experience, some individuals have a difficult time keeping up with the pace of an instructor-led course, which has to be generalized so that it fits the average student.

This means that the more gifted and quick-learning students will be bored to tears, while others may miss important concepts and learning outcomes. Online training often allows students to repeat sections, progress through concepts at their own pace, and ask for additional help without the pressure of being "that person" who raises their hand for clarification during training.

This could also be an immense help to more introverted trainees who need special assistance, but don't want to draw attention to themselves.

Online Safety Training is More Cost-effective

With the wide range of courses available through digital means, it's simple to tailor training curriculums to what specifically applies to your employees, meaning it's more possible than ever before to "trim the fat" when it comes to excessive training costs.

Online training also eliminates the need to provide costly training facilities or consumable materials (think endless, repetitive printing of course materials for 500+ people), as well as any extras (such as lunch for employees staying for an 8-hour training session, room and board for out-of-town instructors, etc.).

Companies such as IBM, Rockwell Collins, and Ernst & Young have reduced training costs by up to 40% by making the switch to online training (Strother).

Facilitates Learning for Employees Whose First Language May Not be English

If you already have employees who may not speak or read English very well, and you come from a small to medium-sized company, you know how challenging it can be to facilitate multi-language training. If your company produces its own training materials, having non-English speaking (or non-fluent) employees means either hiring a translator or purchasing material from another company in their preferred language.

Hiring a translator can be dodgy work, as I have personally seen sub-par translations that looked as though they'd been cranked out of Google Translate, and would not have made sense to a native speaker. Only high-quality, expensive, and thereby trustworthy translations will suffice. If your company hires instructors from the

outside, you will either have to hope they have bilingual interpreters on-hand, or you will have to hire one yourself.

However, companies who use online training often have the option of providing standardized training in multiple languages, from trusted and fluent translators.

IN CONCLUSION

Online training to this day is regarded with skepticism, though it really shouldn't be. While digital learning is new, and therefore scary and untrustworthy upon first glance, it is empirically proven to be just as effective for retention and trainee satisfaction as the traditional face-to-face setting. On top of that, online training has an array of other positive attributes that make it worthy of consideration.

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SIGNS REFRESHER TRAINING IS NEEDED



- Employees constantly fail to complete assigned tasks on time
- Training fails to improve performance
- Productivity level goes down
- Accident/near miss level increases

NO MATTER WHAT INDUSTRY YOU WORK IN, SAFETY TRAINING IS MANDATORY.

For some employers, across industries, providing the required safety training for all their employees and supervisors is a challenge.

Prior to COVID, many companies provided safety training in-house, because it was easier to get everyone together in one room. However, we've seen a rise in the utilization of online safety training to keep social distancing guidelines, but

also because work arrangements have changed.

Online training is a cost-effective, flexible and convenient form of safety training. But how does an employer decide which safety-training program is best for its workers and for the company?

What to Look For

Your online safety training courses

should help you through every step in the education and certification process.

The following are some of the most important factors to consider when choosing the best online safety-training program provider:

Wide selection and variety of courses:

Choose a company that has all the accredited courses needed to meet the OHS legislated requirements, as well as courses the company might require in the future to address potential growth. Selecting a company that offers a comprehensive library of online safety courses means employers don't have to shop around for courses; they can enjoy one-stop shopping. You want to make sure that your provider can offer courses in different languages (if needed), with different lengths, intent, and type. Your

employees have unique learning styles, and you have unique training needs. You want a provider that can give you longer, more in-depth courses for onboarding new employees, and shorter refresher courses to keep safety top-of-mind. You don't want your employees to have to engage with a 30-50 minute online course every time you want to reinforce ladder safety.

Device flexibility: It doesn't make sense to transition to online safety training if you are forced to gather all your employees into a computer lab or office space to take the training. The benefit of online training is that your employees should be able to take and record their training in the field or from home. You want a provider with a learning management system/platform that affords your employees the ability to take their required courses anywhere, at

any time, and on any device. That being said, you want courses that are mobile optimized so that they are as effective when taken from a smart phone as they are from a PC. What's more, you want a provider with the ability to offer courses offline, in case your employee loses connection with the Internet.

Cost savings: One of the greatest advantages of online training is its cost-effectiveness. Ideally, the program you select should have options that maximize savings for your company. Look for a provider with a track history of positive ROI, but also a provider with clear pricing and licensing. Lastly, many providers have relationships with Insurance companies that can actually be leveraged to lower your own insurance premiums.

Training is competency based: We define competencies as the skills and knowledge required to complete a specific job. Many

companies now use competency-based assessments to determine what training employees need to be successful in their work and to improve their effectiveness. An online training program that defines the competencies a specific program will address helps supervisors and employees find the best training solutions. A good provider will allow you the option of creating customized learning paths for employees based on tenure, job function, location or any other variable so that it is easy for you to manage training across your entire organization.

Content is interactive: No matter how good and compliant online training content is, if learners are not engaged, it's likely their attention will be lost. Learning activities that require the learner to interact with the material increases focus and retention. You also want content that is built on accepted and proven adult learning practices, like cognitive learning

theories, that makes use of spacing effects, repetition, reinforcements, gamification, and various other techniques to make sure that your training sticks and doesn't get lost in the forgetting curve.

Content is current and compliant: The occupational health and safety landscape is not static; it is constantly changing. The best training programs are those that are responsive to changes in the regulations, as well as the best practices in a broad spectrum of industries.

Uses real-world and resonating images: Some learners lose interest quickly in a program if they feel it doesn't apply to them or their work. Effective online training should use real-world pictures and simulations, including video clips, technical animation and decision trees, and/or give you the ability to customize your training to make it 100% reflective of your business.

Makes use of microlearning support resources: Microlearning support resources speed up the learning process. They improve memory retention and recall, so that online learners can quickly get the information they need, and then apply it in the workplace to ensure everyone's safety. You may want to break down online training content into bite-sized modules, and upload them to your compliance online training library. The information should be engaging, fun, and informative, so it can promote knowledge assimilation.

Tells stories: Storytelling is a genius way to give employees a touch of reality. It makes safety online training relatable and personal. Through stories, employees are able to connect information to real-world applications. They're also a memorable way to teach the benefits of safety online training to employees, as they illustrate how the main characters use the information to overcome challenges so that employees

can mimic favorable behaviors. The secret is to connect with them emotionally, so that they can see things from the narrator's perspective.

Low mechanical repetition: Often, online courses are developed as glorified PowerPoint decks, with little interaction between the learner and the material. Essentially, the learner just keeps clicking an advance arrow to take them to the next slide. This repetitiveness becomes automatic, and the learner grows bored with the material. Ideally, coursework should require a variety of tasks, with an activity every five to 10 minutes to keep students interested and excited to find out what's coming next.

Voice overs are used: There are several different types of learning styles. Some people are readers, and some are listeners. Courses that use a combination of visuals, reading and audio voice overs have proven

to be the most effective way to deliver online content and meet the needs of a broader range of students.

Uses a variety of testing: In the same way that repeated clicking tends to become monotonous and lower efficacy, using the same testing methods throughout the training program can also lead to disengagement. Courses should use a variety of testing, including multiple choice, true-or-false and fill-in-the-blank. To ensure that no two exams are ever the same, each learner should be presented with an exam comprised of questions randomly chosen from a central question pool. This is particularly important for learners who have to retest in the same program.

Learning Management System & eLearning Standards: If you intend to purchase online safety training courses to deliver to employees through a learning

management system, you'll have to make sure the courses you want to buy are in a format that's compatible with your LMS. Standard formats include AICC, SCORM, and xAPI (SCORM is currently the most common). Make sure to do your homework on this first.

Free help and support: An online training program should offer users technical support as part of the training package. The last thing you want is for employees to get stuck with a product they can't use or courses they can't complete because of technical problems, and for you to be charged every time they do. In addition, implementation or roll-out of a program often involves a little more investment of time and technical resources at the front-end, you want a provider that works with you during this phase and doesn't look at implementation as a billable hour payday.

SELECTING AN LMS FOR ONLINE SAFETY TRAINING

You'll also want to take a close look at the LMS for your online safety training solution.

- Will the LMS be cloud-based?
- Does the LMS have an easy user interface and is the user experience simple for both LMS admins and general employees?
- What are the reporting capabilities?
- Can the LMS be integrated with other workplace software applications?
- What are the security roles?
- Does the company offer training to help your organization begin to use the LMS?
- Does the company provide resources such as integrated help and an online knowledge base you can use for self-guided learning about using their LMS?
- What kind of customer support comes with the LMS?
- Can you import your own training?

- Can you create your own activities, SOPs, Procedures?
- Can you track due dates? Assign by due dates? Set recurring assignments?
- How are employees notified?



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