the VIRTUAL TRAINING PLAYBOOK for government

executive

summary

In the 1700s and 1800s, one-room schoolhouses were the norm. Students of varying ages and learning levels would sit together to be instructed by their teacher. A freshman in high school could share a desk with a fourth-grader. Being mostly rural, many schools had no water or sanitation. They used melting snow for water in the winter and relied on the help of nearby farms in the summer. During the winter months, the schoolroom would be freezing, and teachers would get there early to start a fire in a potbelly stove. Author Laura Ingalls Wilder made the one-room schoolhouse look quaint, but the learning environment was anything but.

Comparing the one-room schoolhouse to today's virtual classrooms shows us that learning has come a long way, but some fundamental challenges haven't changed.

"Where my reason, imagination or interest were not engaged, I would not or I could not learn," Winston Churchill wrote of his primary school experience.

Takers of today's virtual training courses can likely relate, because often, the classes can be downright boring. Content is frequently presented tediously, the moderators like to impersonate Ben Stein's vocal drone and the slide decks are covered in text. What's the point of listening to the live training if you could just read the slide deck?

But virtual training sessions don't have to be awful. In fact, they can be amazing. And they can save organizations money. For example, more than 25 percent of the Office of Personnel Management's staff is in the field, so by going virtual for training on "soft skills," such as leadership, mentorship and conflict resolution, the agency was on pace to save more than $400,000 in travel costs in 2014.

The key is how the information is presented. And that's precisely why GovLoop and our partners have created our latest guide, The Virtual Training Playbook for Government.

In this playbook, we provide you with a framework to bring awesome online training programs to your agency. We break down the process of creating an online training into manageable components to help you understand how to make programs not only a reality at your agency, but a victory.

Our guide will serve as a road map for innovation and provide you with step-by-step instructions to deploy effective online trainings at your agency. This playbook will:

- Show you how to create learning objectives so you can align your training goals and needs.
- Help you identify and reach the target audience for your trainings.
- Teach you how to create a memorable learning experience for your students.
- Give you the right metrics for an online training.
- Provide you with worksheets and activities designed to bring virtual training to your agency.
- Share four government case studies and GovLoop's online course-crafting strategies.
- Highlight how the industry is using technology to create better online training solutions.

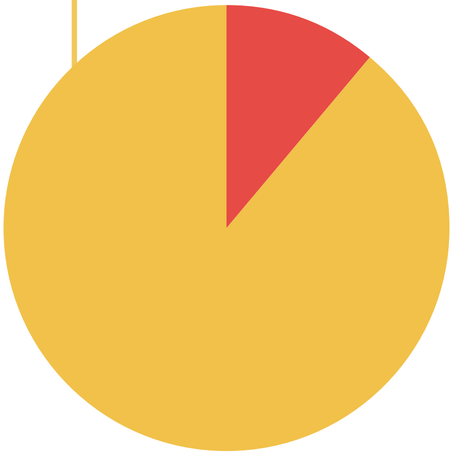
If you feel like your agency has been sitting on the sidelines, now's your chance to get in the game. After you go through our playbook, you'll be ready to bring virtual training to your agency.

But before we delve into how to create an awesome virtual training, we have to understand the current government training landscape.

contents

The Current State of Virtual Learning:

In a recent survey, we found that 90 percent of respondents attended at least one virtual training in 2014.



Here's what we know: A survey of GovLoop members found that almost 90 percent of respondents attended at least one online training last year. That number is up 2 percent from our online training survey last year. (That survey that was part of GovLoop's Guide to Virtual Events.) And almost 100 percent of respondents plan to attend a virtual training this year. That's great news for the online training community.

But those same survey respondents said they would still prefer to go to trainings in person. The reason? Many said they found online training either boring or ineffective compared to in-person trainings. They cited reasons such as:

- "The trainers never know what they are talking about."
- "Every online training I have attended this year has been horrible."
- "I couldn't tell you a great online training I have been to in the last year. None of them are memorable which means to me there was nothing impressive about them."

Those quotes make one thing crystal clear: Effective and well-crafted virtual trainings are more in-demand than ever. But here's the rub: They're not easy to create. The default for online training is reading directly from slides or not adapting content to the virtual environment.

However, when engagement and online training coalesce, meaningful learning moments can happen. "I was skeptical about spending the day at GovLoop's Virtual Summit. I wondered how useful or informative it would be. I was blown away. The speakers were wonderful. The amount of information and resources were incredible. I could network! I am so glad I spent the day with you all and I can't wait for the next Virtual Summit," said one attendee of the GovLoop State and Local Virtual Summit last October.

Mismatched content and course descriptions also bothered our survey respondents. "I go to trainings all the time where the content never actually delivers what is described," one respondent wrote. "What stuck out to me about the best training I attended last year was it was short and to the point and, most importantly, actually delivered what was described."

Matching the content to the course outline is a huge challenge for many trainers. (Don't worry — we'll talk about how to create proper learning objectives in the next section.)

With budgets tightening, more agencies are turning to online training to fill the knowledge gap. Forty-three percent of our survey respondents said their agency was invested in online training and another 20 percent said their agency was dipping its toes in the online training world. This means more than half of agencies will be looking to digital services for training in 2015.

However, when asked if they felt they learned more from online trainings compared to their in-person counterparts, only 15 percent of respondents said they learned more online.

Outside distractions were the biggest reason respondents felt they learned less online, according to the survey. Some cited e-mail, slow Internet connections and chatty coworkers.

"Staying on task and paying attention is incredibly hard in an online training," one respondent said. "It is easy for me to be distracted by just about anything. And you have anything at your fingertips. Typically there is no accountability for online training, so if you are distracted no one knows."

Another survey respondent agreed: "I don't get anything out of virtual trainings because I am constantly bombarded with co-workers and bosses who interrupt during the training."

Thankfully, there are strategies to keep students focused. Last year, GovLoop hosted more than 40 free online trainings and

A GovLoop Survey

reached 30,000 students. On average, attendees stayed logged in to the hourlong program for 55 minutes and more than 60 percent answered three or more poll questions. Focused engagement is possible, just not easy.

Our survey respondents said training worked best when it was easily digestible, modular and fun. "I did an in-depth cybersecurity training last year. It worked because I didn't have to take copious notes because the session is archived, so I can go back and look whenever," a respondent said. "The virtual nature let me take it at my own pace, allowing me to absorb the information in small chunks. If I had to take that training live, it would have been an all day thing in an uncomfortable room."

Despite the challenges, however, many survey respondents appreciated the flexibility and accessibility online training provides:

- "Online training has allowed me to attend more courses promoted by institutions from different locations."
- "I get more training done, as the time is more flexible and the cost is less."
- "I don't have to travel, which is a huge thing."
- "Online training is much better than no training, which was the case back in FY 2012."

As you can see from the results of the survey, virtual trainings in the government are far from perfect. But here's the thing: Budget cuts and travel restrictions are forcing many agencies to go virtual. In last year's survey, we found that 89.9 percent of respondents were more likely to attend a virtual event or webinar instead of an in-person event. The reason? Cost. So we don't just want to make trainings better; we need to.

So that's what we're going to help you do in our playbook, by giving you the tools, checklists and resources you need to take your training from blah to amazing.

I did an in-depth cybersecurity training last year. It worked because I didn't have to take copious notes because the session is archived, so I can go back and look whenever. The virtual nature let me take it at my own pace, allowing me to absorb the information in small chunks. If I had to take that training live, it would have been an all day thing in an uncomfortable room.

- GOVLOOP SURVEY RESPONDENT

PLAY #1: BUILD your virtual training content

LEARNING OBJECTIVE

Before you can put on an awesome training, you have to assemble the right team. You have to create engaging content. Find the right moderator. Figure out your engagement points. Meet compliance standards. After reading this section you'll be able to craft your own learning objectives, understand 508-compliance requirements and apply eight tips for creating compelling content.

I have some bad news. There is no such thing as paint-by-numbers training. There is no one-size-fits-all training. In fact, trainings come in all sizes and shapes. But there are some basic tenets that make an effective online experience.

Types of online learning experiences include:

- Live, instructor-led sessions.
- Archived content.
- Self-paced.
- Group-based.
- Video interviews.
- Narrated slides.
- Interactive exercises.
- Self-assessments.
- Guided reflection.
- Virtual simulations.

Each type requires different preparations. "If you want to do a product demonstration for 1,000 people, that's great. You could do an hourlong webinar. But if you want to actually train people on how to use the product, then you can only have a class of about 35 people and add some interactive and hands-on elements," said Jane Bozarth, E-Learning Coordinator at North Carolina's Office of State Personnel. "You need to know how to differentiate between your training needs."

CREATING A CLEAR LEARNING OBJECTIVE

Regardless of training type, the root of every memorable learning experience is identical: Start with clear learning objectives. An objective is different from the overall goal of the course because the objective describes the predictive outcomes of the course. The objective tells participants exactly what they will learn by taking the course.

The University of Washington has created a three-part guide to crafting a learning objective that states, "The learning statement should be a clearly worded sentence that expresses what participants will have learned and how they will demonstrate their learning."

We have adapted the university's guide to fit government needs:

STEP A

Use the following eight questions to guide the development of your objectives.

1. Does your statement clearly describe the type of training (i.e., teaching information, improving a skill or changing an attitude)?
2. Is it realistic for your proposed audience, available resources and length of time?
3. Is it focused on one specific job-related task or knowledge area? Does the training tie to specific learning objectives , executive core qualifications or continuing professional education credits?
4. Is it worded as a behavioral statement — something they actually have to do, not just understand or believe?
5. Is the statement specific and precise about what they are supposed to be able to do?
6. Is the entire learning objective stated clearly, with no extra words?
7. Can you measure it to determine if learners understood the material?
8. Is anything missing?

STEP B

Ask a subject-matter expert (SME) to analyze your learning objective. How can it be improved?

STEP C

If necessary, rework your learning objective so it helps learners achieve the outcome you identified at the beginning of this exercise.

At the end of the learning statement you must be able to fill in this blank:
By the end of this training, a participant should be able to _______________.

To help you out, we drafted two examples of well-crafted learning statements:

- Following the mentor training, government professionals with less than five years of federal experience will be able to explain all five steps for enrolling in an OPM-crafted mentorship program.
- After attending this cybersecurity training, all new federal employees will be able to articulate the basics of how to securely password-protect their work computers and mobile devices.

The I-Tech Implementation Guide states that the best learning objective statements are SMART: specific, measurable, action-oriented, reasonable and time-bound.

"We are living in the age of the learner outcomes," Bozarth said. "We spend a lot of time talking about, 'How can I teach this?' when really we need to be asking, 'How can we make sure the attendee understands the new requirement or best practice?' We need to design for the learning outcome first."

If you can create an effective learning objective, you can set the right expectations for participants. "What sticks out to me for a good training is when a training actually delivers what it describes," said one survey respondent.

Once you have crafted your learning objective, you can move on to crafting the training's content.

8 Tips for Creating Engaging Content

The survey of GovLoop members showed trainees crave interactive, authentic and case study-driven training. "You can't let an online training just turn into a lecture. You need to look at the experience you are trying to give," Bozarth said.

In 2014, OPM's Personnel Development Trainer, Nate Mercer, created 30 online courses geared toward soft skills, leadership, mentorship and critical conversations. We sat down with him to learn his top eight tips for crafting engaging online virtual training content.

1. **USE GOOD FACILITATORS.**
   SMEs know the material best, but that doesn't mean they can effectively deliver an engaging presentation. The best content will not be heard if the speaker cannot clearly and effectively deliver the message. "Sometimes you have to train the trainer," said Mercer.
2. **KEEP PEOPLE ENGAGED**.
   Often it is difficult in an online training to know if and when students are actively engaged. "I like to pause and ask a poll question or have an interactive element every five minutes," Mercer said. "In my smaller trainings, I will actually call on students to answer questions. I like to keep people on their toes."
3. **USE CASE STUDIES OR STORIES.**
   Students can often connect better with a story or case study than they can with abstract learning concepts. They will also have an easier time explaining the learning objectives in story form than as a list of requirements.
4. **CREATE A TIME FOR LEARNERS TO ASK QUESTIONS**.
   Depending on the size of a training, asking questions can sometimes be a challenge for learners. And we know from our survey that attendees found it very frustrating to have their questions go unanswered. One solution is to create a separate chat feature where students can engage with one another and the moderator or facilitator. In this chat window, students can feel more a part of the training. But "you do have to keep an eye on the discussions; make sure people are staying on task," Mercer added. "It helps to have someone moderating the chats as well."
5. **GET RID OF TEXT-HEAVY SLIDES.**
   "If you want death by PowerPoint you can do it, but what's the point? Slides should be used to help guide a class; they should not be the class." said Mercer. A Citrix report found that 60 percent of online trainees wanted more visuals in the presentations. Graphs and charts are a great way to add a visual element without adding words.
6. **CREATE A CONNECTION.**
   Mercer uses a webcam during his trainings so students can see and react to him. "I found from evaluations my scores go way up if the webcam is on compared to just a disembodied voice. And trust me, it's not because I'm good-looking. I have a face for radio," Mercer said. "But when the webcam is on, people can read body language. You can also be a lot more animated." What do you do when video is not possible? Amy DeWolf, GovLoop's online training expert, encourages facilitators to be like "Oprah on steroids." When students have only your voice to engage with, you have to ramp up your show.
7. **USE HUMOR AND PLAIN LANGUAGE.**
   "You need to inject humor into the presentation. I am not talking about making the training like a comedy roast, but you need to add levity or you will lose your audience," Mercer said. The government also has a tendency to use confusing and bureaucratic language. An online training shouldn't. You need to speak the language of your participants.
8. **REMIND AND REVIEW.**
   People remember what they learned last, so make sure to review at the end of the session. Do the CliffsNotes version of your presentation on the last slide. "The more interactive your review is, the better it will seal the material into long-term memory," Mercer said. "Play a game or ask questions at the end of the session to review the material you've just presented."

Compliance Commandments

When you are crafting content for training, it is essential to keep in mind that you can't simply convert an in-person training to online. Things have to be changed and altered. One of the biggest considerations is compliance and accessibility.

Not all trainings are subject to the same level of accessibility. However, Section 508, an amendment to the Rehabilitation Act of 1973, requires that federal agencies' information technology be accessible by people with disabilities. These rules are even more prevalent if government trainings are open to the public.

For many government agencies, the technology itself can be a barrier to accessibility. For example, a platform may not have a closed caption feature. But there are solutions to make these products work.

The Food and Drug Administration has created a few "[accessible work-arounds]":

- **Prior to the meeting ask your presentation participants if they have assistive needs so that you can plan towards meeting those needs.** Communicate with them to find out what they need to participate. Even if you do not receive any requests, have alternatives ready. "I had a blind student once who contacted me ahead of time. I was able to plan ahead and get him the information he needed," said one training expert. "For that student, I was able to make the necessary changes because he let me know."
- **Provide a telephone-based teleconferencing connection in addition to the VOIP (Voice over the Web) Webinar.** This will allow participants with assistive needs to have access to the meeting if the webinar client or plugin is not accessible. Prepare for how such participants will be asking questions, vote, or collaborate in the presentation in addition to those using the inaccessible interface.
- **Schedule the Federal Relay service for deaf or hard of hearing participants.** The Federal Relay Service (FRS) (http://www.fts.gsa.gov/frs/frs_main.htm) is for the use of hearing impaired individuals. The relay service also provides for Video relay and Braille services.
- **If documents such as PowerPoint, Excel and MS Word are going to be used in the presentation, these should be sent out to participants in advance of the meeting.** Send your participants Plaintext versions of presentation documents in advance of the meeting. This is especially important for heavily graphic documents such as PowerPoint. This will allow a participant with low vision the ability to prepare a Braille version of the Plaintext in advance of the meeting so that they may listen to the speaker at the same time as they "read" the Braille with their fingers. This is a better alternative to trying to listen to both the Presenter and the Accessible Technology reading at the same time. If you make changes, send out an update so that participants are not misinformed.
- **Last but not least, if the presentation was recorded, remember to prepare accessible versions of the webinar recordings.** Videos require captioning and a transcript.

The need for 508 compliance varies from agency to agency, but it's worth giving it careful consideration from the outset so you don't lose time having to rework your learner experience.

» To help craft your own learning objective, use our step-by-step worksheet.

Polling 101

Including a poll during a presentation is a great way to create talking points, encourage engagement and get real-time feedback. Here are five quick polling tips.

1. Ask poll questions that are quick to answer and clear. Steer away from ambiguous questions.
2. Start with easier polls (i.e., those with a yes or no answer) and increase the level of difficulty from there.
3. Don't be afraid of open-ended poll questions. Most people think of polls as multiple-choice answers. But you could ask, "What is the best piece of advice you have ever received?"
4. Let everyone answer the poll before you show the results. Often, people will switch their answer if they choose the non-popular choice. By hiding the results, you can ensure authentic results.
5. Use polls to help check for clarity. You can ask, "Do you understand what has been presented so far?"

Getting Rid of Check-the-Box Online Learning

AN INTERVIEW WITH DEAN PIANTA, SOLUTIONS MANAGER, ADOBE

Over the past twenty years, the online learning environment has changed dramatically. A quick review of the market reveals hundreds of tools and learning management systems (LMS). Although standards exist (i.e. SCORM, AICC, etc.), the overall complexity and sheer number of options available are not helping organizations figure out how best to improve the training mission.

Historically, the LMS was about managing courseware, students, and classrooms. Reporting was confined to who viewed a course; who passed it; and who needed to take it. "From a human resource standpoint, we had to keep track of continuing education required to stay current in someone's role," explained Dean Pianta, Solutions Manager, Adobe. "It was more of a 'check-the-box' proposition – that was all."

The old model failed to put the learner at the center of the equation. "The new model of learning needs to be expanded to manage the actually learning going on," said Pianta. "What is being learned, what learning objectives are missed most often, what experts exist in the field, and how do we analyze feedback to improve learning."

"When we look at training solutions, we have to embrace solutions that support both the formal and informal aspects of learning," added Pianta. "At Adobe we call our model 'continuous learning.' The theme draws on the strengths that Adobe has as a web content leader with Adobe Experience Manager (AEM). Yes, you have to upload a course and deploy it, but you also have to think about how someone is going to consume the information and how the learning process will take place. We have to shift our thinking to how people learn, how we gauge that, and then how we improve the deployment of learning to maximize value from the learning system."

As one example, Pianta shared how the military needed to transfer a three-day in-person course about diabetes online while retaining the complex content and making the course interesting and digestible.

"The question becomes, what do we do with three days of PowerPoints?" asked Pianta. "When we go to these new continuous learning profiles we save money and achieve better learning but only if we change the learning methods to accommodate an online or blended delivery. Fundamentally, we need to understand we didn't walk through slides when we were face to face in a classroom. In fact, the instructor provided the actual learning – through activities, case studies, dialogue, etc., and the presentation was, in fact, a visual aide. Unfortunately, all too often we did take the visual aides (the PowerPoint) and base an online course simply on them. That was, and still is, a mistake. We can't just shove slides into a synchronous room and expect to have people sit at their desk looking at a computer screen for three days straight. We can try to compensate for human the lack of human contact, but at the end of the day, we have to realize that the entire learning program needs to be broken down into a set of assets: documents, video, activities, virtual classrooms, assignments, etc."

In this way one can construct a blended learning path that has synchronous, asynchronous, formal, informal, and assets that learners can take with them, beyond the "boundary" of learning, into the field.

Additionally, Adobe found through its extensive metrics that for true engagement in a virtual classroom, learners need to be prompted with a poll, activity, a whiteboard exercise – anything that makes them think. As learning objectives are presented, virtual instructors need to get a feel for who is tracking, who isn't, or who isn't even paying attention. These types of interactions create both engagement and metrics.

The deeper metrics are the first step toward evolving a "check-the-box" course into a more mature, learning experience. "A lot of groups have been in the check-the-box mode. That mode asks, 'did Juliana take the course?' It doesn't ask if she learned anything, or what the thousand other people who took the course were struggling with the most. It's only when we start to ask those harder questions that we understand how we can make our content better," said Pianta.

Within a continuous, blended learning program, Pianta said virtual learning instructors should always ask these three questions:

1. How are learners proceeding down this learning path?
2. Why is no one looking at this one asset?
3. Why is everyone missing this learning objective?

At the end of the day, "No chief learning officer is thinking about how to build a single course," explained Pianta. "They're thinking about, how do I serve the enterprise next year by creating 85 courses? He needs to know which courses will help the most students in the most effective way."

PLAY #2: ATTRACT an audience

LEARNING OBJECTIVE

You can have the best content in the world, but if no one attends your trainings it's a waste. After reading this section you'll be able to use our six strategies to build your audience and attract the right people to your trainings.

Like Ray Kinsella in Field of Dreams, many believe that if they build it, people will come, but even if you create the best online training out there, it will fail if no one knows it exists. There is no magic in getting an audience for your online training. You need to put in the work. You need a strategy. You can't just build a training and expect students to show up. (Unless, of course, the training is mandatory. If that's the case, go ahead and skip this section.)

Here are a few proven ways to help build your training audience base:

1. MAKE CONNECTIONS.

In order to get an audience to your trainings you have to be active. Start with your direct connections. Find out who is on your website regularly. Use web overlays to make signing up for trainings easy. GovDelivery found sign-ups increased between 200 percent and 500 percent because of web overlays.

But web overlays won't solve all your attendance problems. You need to have many different sign-up options. Social networks are a great place to spread the word.

OPM's Mercer has taken building an audience for trainings into his own hands. "I have a doc where I keep information on all of my students," he said. "Then when I produce a new training, I make sure that I send an e-mail to all my former students letting them know about the class. Most of my students end up taking between three and five courses from me."

2. GIVE AN INVITE THEY CAN'T REFUSE.

The average person gets more than 100 e-mail messages a day. Your notification about a training has to stand out in the noise. If your e-mail invite doesn't work, your training session doesn't get noticed. So treat your subject line as a top priority. Subject lines should be no more than 50 characters long. One way to find out what subject lines work best for your audience is to A/B test them. To do it, split your recipient list in half. Send each group a different subject line. Then look at which was opened more.

To include more information, use pre-header text, the text that shows up on a mobile device right under the subject line. You can get in more details without lengthening the subject line.

Finally, make sure the registration button is big and clear.

3. CONFIRM AND REMIND.

Here is an unfortunate fact: Just because people sign up for a training doesn't mean they will attend. You have to remind them — often. One easy method is to add a calendar invite along with the registration confirmation e-mail. You can also send reminder messages the day of the training and a 15-minute "It's go time" warning e-mail. If you've been to a GovLoop training, you know we bombard you with e-mails, but we promise this strategy works!

Another way to improve accountability is to create group learning and training experiences. You are more likely to go to the gym if you know your friend is waiting to work out with you, right? The same is true for online training. If you can get a friend to learn with you, you are more likely to attend the training.

4. FOLLOW UP WITH RESOURCES.

The training shouldn't end when the webinar times out. People want to see an archive of the session or be able to download the slides. One way to impress your users is to be proactive in getting them the information. Send a follow-up e-mail with all the resources. Include a thank you, reinforce the value proposition, and at the bottom, ask people to sign up to receive upcoming information.

"We have found at GovLoop that the follow-up e-mail is incredibly important," DeWolf said. "Not only do we attach an archive of the training and a written recap, but we also include additional resources like future trainings or guides. We have found a lot of success through the follow-up."

One of the reasons follow-up is so important is because you already have a learner engaged. You don't want that relationship to stop. Newsletters, additional trainings and surveys are just a few examples of content that keep people coming back.

5. GET SUPPORT FROM THE TOP.

We all know that government tends to be hierarchical, and for trainings to be truly successful, you need the bosses — the directors, the administrations the human resources managers — to trust in training. If they don't take training seriously, why should your employees? One way to show the value of trainings is to show proven results. Trainers need to be able to demonstrate success to the C-level and above and then have those executives promote the programs in agency newsletters and memos.

6. AVOID TRAINING FATIGUE.

The quickest way to get employees to tune out your training and never attend again is to feature content that is irrelevant to them. Communicating about what employees can expect can also reduce the potential for frustration. One easy solution is to have a webpage or calendar with all the trainings for the year. Employees can choose the courses they want to take. Make finding and picking a course as easy as possible.

As we described earlier, there are many types of trainings and the marketing and outreach for each version is slightly different. For example, a free one-time online training about mentorship is much different from a four-week course on open data. The key to success is to make sure you are matching the right message to the right type of training.

» Use our checklist to make sure you are creating the most compelling E-mails.

PLAY #3: DELIVER a memorable experience

LEARNING OBJECTIVE

OK, so you have created awesome content. Well done. You got your audience there. Excellent. But now you actually have to knock the training out of the park. After reading this section you will know the three members you need on your training team, how to stop technological issues ahead of time, and the seven keys to being an engaging speaker.

1. CHECK YOUR TECHNOLOGY.

Let's get the elephant in the room out first. Nothing will ruin an online training experience faster than bad technology. "In the past year, we haven't had an online training where at some point the technology hasn't stopped working," said one agency training expert.

Sometimes you have to make the most out of the technology restrictions you have. Maybe your system cannot handle eight polls and four videos. Maybe you have to use a PowerPoint presentation and VOIP. That's OK! It's better to know your technological limits than to push the envelope and lose viewers.

It's also important to match the technology to the format of the training. For example, a one-hour webinar might not need private chat rooms or interactive polls, but a multiweek course might need those capabilities — and more.

2. SCHEDULE BREAKS AND TIME CHECKPOINTS.

Here's another helpful hint: Schedule in bathroom breaks or "eye breaks." It might sound silly, but as one survey respondent noted, "I was in a day-long online training and there were no breaks. I could never get up to use the bathroom." According to TechSoup, most online audiences lose interest after about two hours, so organize your topics and information so they can adequately be covered in this time period, or break your curriculum into chunks of two hours or less. When you're breaking a large topic into smaller chunks, leave at least 15 to 30 minutes between sections.

3. BUILD THE RIGHT TEAM.

To deliver a memorable experience you have to have the right team. We've already talked a bit about what makes an engaging facilitator, but there are many more players. "In general, there are three main players in a webinar: the organizer/facilitator, the presenter or presenters, and back end support manager. You might fill all three of these roles yourself, you might assign them to three different people, or you might need more than three," TechSoup states.

OPM's Mercer wears all three hats during a training, but he cautioned it's possible only because his class size is small. "I can answer questions as I go, but if you have 1,000 people in your training all asking different questions, it can be overwhelming. You need help."
Mercer has also been in the training field for many years. If you are new to online training, don't go it alone.

The three main roles needed during an online training are:

MODERATOR: The moderator must keep the train moving, so to speak, during the webinar. This person introduces speakers, asks questions of the SMEs, asks the audience questions and sets up polls or interactive elements. The moderator also monitors the overall situation and helps troubleshoot logistical and technical problems. In other words, the moderator is the coach, the quarterback and the cheerleader.

SMES: The meat of a presentation doesn't come from polls or questions. The heart of a presentation comes from the experts. These are the people who provide the important information. Prior to the presentation, SMEs should create slides or interactive elements to help illuminate the course objective.

BACK-END SUPPORT: We know technological snafus can ruin a presentation, but sometimes the problems are on the participants' side. Maybe they need help logging into the system or maybe their browser won't support the technology. When these situations arise, it is helpful to have someone sitting on the back end to assist. For especially large trainings, back-end support can also be very helpful for organizing questions for the moderator.

MODERATOR

SUBJECT MATTER EXPERT

BACK-END SUPPORT

4. HAVE AN ENGAGING TONE AND CONTENT.

"You have to practice, practice and practice some more, but you really don't learn a lot until you find out what doesn't work for you — until you fall flat on your face," Mercer said. To help you soften your landing, here are a few tips on what makes an engaging speaker.

KEEP THE INTRO SHORT.

We've all been there. You are sitting at a dinner party, caught in a conversation that you think will never end. You want the story to be over, but it's just getting started. Moderators in online trainings often feel like they have to set the stage, but setting up an online training shouldn't be an odyssey. Good storytelling gets to the middle of the story fast. No one cares how you found the speakers, how you came up with the topic, what you had for lunch. They are there to learn. Give them a quick outline of what they will learn and move on. Keep the intro to two minutes or less.

The same is true for speaker introductions. This is especially hard in government because speaker titles are a mile long, but shorten and condense. "I only read only about 25 percent of a full bio and keep it to the highlights and compelling pieces," said Steve Ressler, Founder and President of GovLoop. Ressler moderates most of GovLoop's online trainings. "It's imperative you keep the introductions in your own speaking style and voice. Don't try and just read the bio word-for-word or you end up sounding monotone."

CREATE A STRUCTURE.

No one wants to hear someone reading from a script, but speaking conversationally can be difficult for new speakers. To feel comfortable, you need structure.

One easy way to structure a training is by using a challenge and solution model. Have the speaker explain an issue and how it was resolved. Keep the focus tight: This is what happened; this is what we did to fix it. That way the speaker stays on target. People feel much more comfortable in a controlled environment. In no way should you let your speakers "wing it."

PLAN AHEAD FOR Q&A.

For new speakers, a questions–and-answer section is often the most terrifying. You don't know what to expect. The first tip is to always have one or two pre-planned questions. Consider these warm-up questions. Often, you can solicit questions from your audience ahead of time, and these pre-planned questions can make a speaker feel much more comfortable. If there are multiple speakers, it is up to the moderator to direct the questions to the person most adept to answer. Each question should be asked directly of an individual. Silence can be deafening if no one thinks the question was directed at them.

But don't forget the audience during the Q&A. "I always highlight agencies that are in attendance," Ressler said. "I will say, 'We have a question from a person from the FDA or the city of Seattle.' People don't like their specific name being mentioned but enjoy when their agencies are highlighted."

SHORTER IS BETTER.

Mark my words: Speakers will almost always exceed their allotted time. To avoid that, plan accordingly. For instance, if you assign a speaker eight minutes, plan for 10. Also, have speakers do a run-through or practice with the moderator ahead of time. This will allow the speaker to feel more comfortable and get a better handle on time.

THROW OUT THE TRADITIONAL SLIDE DECK.

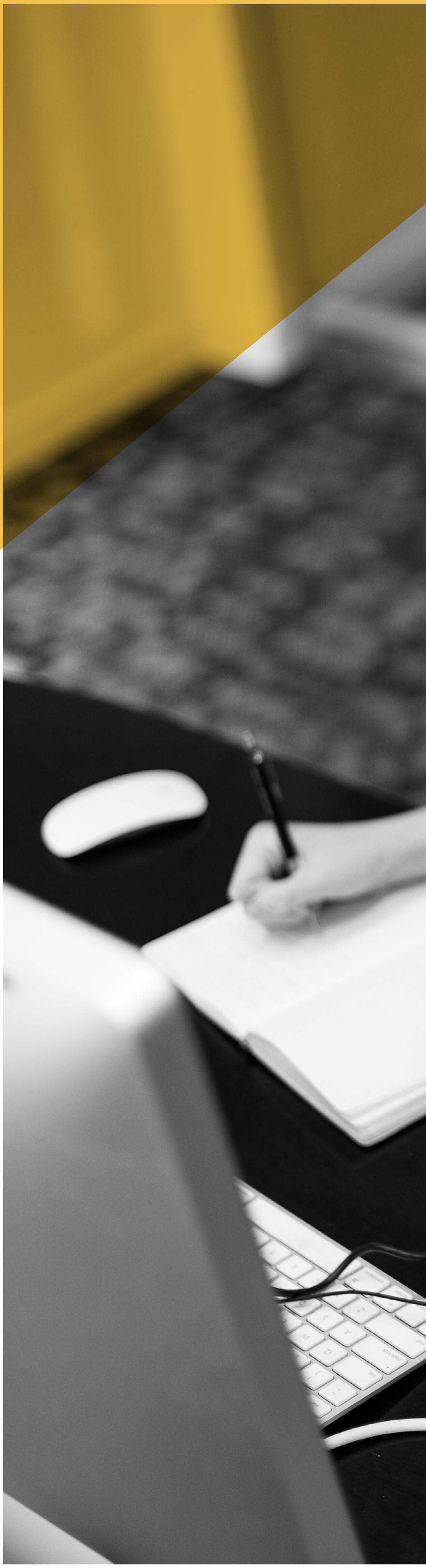
No one wants 8,000 bulleted lists in a PowerPoint. Whenever possible, use an image to tell the story. If a person can download the slide deck and have the full presentation, you're doing it wrong.

DON'T BE AFRAID OF HUMOR.

Adding jokes to a presentation is a great way to engage the audience, but because there is no audience feedback in most virtual environments, landing a joke in the virtual world can be daunting. To be a great moderator or speaker, practice talking to yourself.

SAY THANK YOU.

You would be surprised how far a simple thank you will take you in an online training. "I always thank all attendees for taking one hour out of their day to do their job better," Ressler said. "Your attendees' time is valuable and you should honor that. A thank you is a simple reminder that you appreciate the work they do. That appreciation doesn't go unnoticed."



5. CHECK IN AND REMIND.

Even the most skilled and effective trainers can lose an audience if they don't regularly check in with their students. No one wants to be lectured to for hours on end.

Before the training even starts, trainers should set an expectation for how long the session will last. Attendees of in-person training sessions know they will be in the room for a specified amount of time. Online trainings need to create the same environment. In essence, trainers need to create a virtual "do not disturb" sign. One way to do this is to reserve time. Create a calendar invitation for the training, so the time shows up as blocked off on attendees' calendars.

Once you have the student in the online learning environment you need to continually check in. This is where polls, Q&As and chat rooms can make a big difference. OPM's Mercer said he checks in with students every five to 10 minutes.

North Carolina's Bozarth agreed. "It's a common misconception that you can't check engagement in an online training," she said. "That notion is just an excuse. First of all, you can see body language in the bandwidth. For example, if you ask a poll question or a question in the chat box, how long did it take people to answer? You can tell a lot about the level of engagement by the speed of which people respond."

Sometimes the best way to create a memorable and lasting virtual training is to learn lessons and best practices from prior trainings. Which brings us to figuring out how to measure the success of a virtual training.

» Do you know the virtual training roles? Try our matching game to find out if you can fill a virtual training roster.

PLAY #4: MEASURE success

LEARNING OBJECTIVE

You did it! You created an awesome online training! All done? Nope. Far from it. Now you have to prove the online training worked. You have to measure the success. After reading this section you will know eight strategies for crafting a good online learning quiz and how to effectively use traditional and personal surveys.

By now you've probably heard someone in your organization say virtual trainings don't work, and if you don't have metrics, you can't prove them wrong. It's that simple. Metrics change minds.

So how do you measure success? It starts with the learning objective. You remember, right? It was a few pages back.

For students to walk away from the training satisfied, they need to have attained those stated learning objectives. They need to now know how to find a mentor or the five simple ways to improve their password protection, for instance.

Short quizzes are a great way to measure learning. Quizzes are especially common for mandatory trainings and extended learning courses.

> *Start with: what does the participant need to know? What does the person need to be able to do when they leave the course?*
>
> - CAITLIN MARKHAM
> *LEARNING STRATEGIST, GOVLOOP*

SO WHAT MAKES A GOOD QUIZ QUESTION?

The eLearning Industry has eight tips for creating an effective quiz:

1. Provide clear guidelines for the assessment, including estimated time to complete and any additional resources your learners may need. You should also group questions with the same directions together.
2. Match each quiz question to a specific learning objective.
3. Concentrate on the most important, critical content. Don't waste your learners' time making them learn trivia.
4. Question difficulty should come from the content, not the wording. Keep in mind your learners' reading levels and avoid double negatives or awkward wording.
5. Keep a sticky note at your desk with these words on it: always, often, frequently, never, none, rarely and infrequently. Go through your quiz questions and delete all instances of those words. Vague adverbs like these tend to confuse learners.
6. Ensure that each item has only one correct answer.
7. Prepare the answer key at the same time as the assessment. This helps you keep track of everything and make sure you've covered all topics.
8. Test the assessment before giving it to your learners. You want to make sure it makes sense and doesn't contain any errors.

Quizzes can also help a trainer be more agile. In a multi-week course, a trainer can use a quiz to gauge where students are getting stuck and need more information. Although a course should have a formal structure and outline, quizzes allow the trainers to delve deeper into a particular area based on feedback.

"When I am crafting quiz questions for my courses, I always start with the learning objective," said Caitlin Markham, a learning strategist at GovLoop. Markham has been working in the online training industry for five years and has created more than 25 online courses. "Learning objectives truly drive the format (i.e., multiple choice, true/false, short-answer, etc.), and the length for each question. Start with, what does the participant need to know? What does the person need to be able to do when they leave the course?"

Markham doesn't craft her questions in a vacuum. "After I have crafted my quiz questions, I make sure to get input from subject-matter experts and my instructional design colleagues to make sure I'm asking the right questions in the right way in order to meet my learning objectives." Surveys can also be a good way to elicit feedback.

Two Takes on Surveys

1. TRADITIONAL SURVEY

This is a survey from a site such as SurveyMonkey that generates a link that trainers can send to their students. But if you have sent out a survey before, you know it can be hard to get responses. "We get about a 5 percent response rate on our surveys," one training expert said. You usually hear from respondents when they love the training or hate it. There is little in the middle.

But there are some things you can do to improve your response rate:

KEEP IT SHORT.

If your survey takes longer than 20 minutes to fill out, you are going to lose respondents along the way. It's critical that we ask only a few key questions. Try to keep your surveys to five questions, and definitely don't exceed 10.

ASK ONLY FOR INFORMATION THAT YOU'LL USE.

"Every question should serve a purpose. And don't tell me that one extra question 'couldn't hurt.' It does. If you don't use the information you're asking for, you're wasting your customer's time," according to KissMetrics, a blog for marketing professionals. "You're also wasting yours. You'll have a whole batch of responses to look through and none of them will make a difference. Instead, save time and get better responses, by including only the essential questions."

START WITH OPEN-ENDED QUESTIONS.

The best metrics always come when you aren't forcing someone down a particular path, which is what multiple-choice questions do. "When you start asking your customers questions for the first time, their answers are going to completely surprise you," according to KissMetrics. "So if you build a survey full of rating scales and multiple choice questions, you'll restrict answers to your own assumptions. But when you use open-ended questions, you'll know what your customers are really thinking."

2. THE PERSONAL SURVEY

If you want to gather more one-on-one feedback, consider asking individual students to rate the class. You can give students a parameter, such as, "How did you react to my learning style?" This type of focused survey is best in small and multisession classes.

Surveys can be one of the most effective tools for creating a more robust training, but they must adhere to federal regulations. If the training features participants outside government, the Office of Management and Budget must first approve the survey.

Per OMB regulations, "*The Paperwork Reduction Act of 1995 requires that Federal agency information collections employ effective and efficient survey and statistical methodologies appropriate to the purpose for which the information is to be collected. It further directs the Office of Management and Budget (OMB) to develop and oversee the implementation of Government wide policies, principles, standards, and guidelines concerning statistical collection procedures and methods.*"

Basically, the act requires that all survey data collected be catalogued and saved for the official government record. The data also must protect the privacy and security of the participants. While understandable, the statute makes it difficult for agencies to be agile when developing a survey. Survey approval can take months or even years.

The good news for agencies is this doesn't apply to internal training sessions, in which participants work within the government.

If a training gets positive feedback and demonstrates improvements to job performance, then trainers can easily show a return on investment. But North Carolina's Bozarth warned that first all stakeholders need to be on the same page about what makes a successful training.

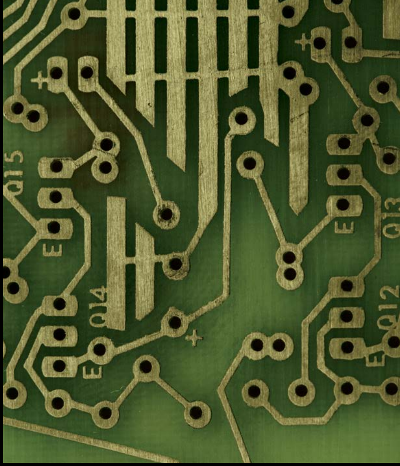
North Carolina's government is home to 85,000 employees in 30 agencies. A few years ago, the state contracted for a new licensing technology, but it went unused because employees were confused about how it worked. The state created an online training program to educate users about it.

"But I was worried that people still weren't using the technology right," Bozarth said. "So I called IT and I asked how the product was going. Their response was, 'It's great! We have had 6,000 people take the training since Christmas.' But here's the thing, people still weren't using the program. They still didn't understand it. IT's idea of success was more people taking the training and setting up meetings. But people were being dragged to all of these online meetings because they didn't know how the technology was supposed to work in the first place. It became a burden to them. So you have to be careful what you say your measure of success is going to be. You have to make sure everyone is aligned."

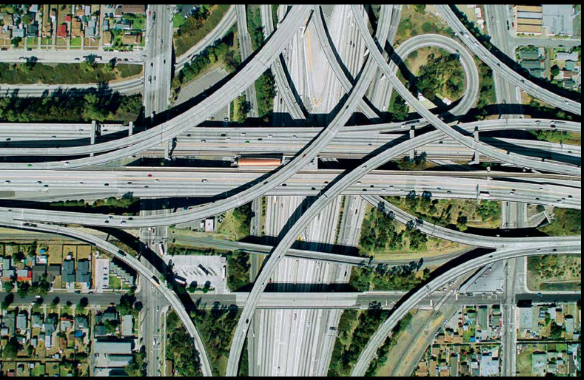
> *"Every question should serve a purpose. And don't tell me that one extra question 'couldn't hurt.' It does. If you don't use the information you're asking for, you're wasting your customer's time,"*
>
> - KISSMETRICS

» One of the easiest ways to figure out if students have attained knowledge is test them. Follow our checklist to make sure you are testing your students properly.





TOMORROW starts here.

Today, it's easy to marvel at how far we've come.

Our phones talk to our TVs to record our favorite shows. Doctors in Estonia diagnose patients in Denmark. Social networks help companies improve customer service.

And yet, up to now, more than 99% of our world is not connected to the Internet.

But we're working on it.

And tomorrow, we'll wake up pretty much everything else you can imagine.

Trees will talk to networks will talk to scientists about climate change.

Stoplights will talk to cars will talk to road sensors about increasing traffic efficiency.

Ambulances will talk to patient records will talk to doctors about saving lives.

It's a phenomenon we call the Internet of Everything–an unprecedented opportunity for today's businesses.

Tomorrow?

We're going to wake the world up. And watch, with eyes wide, as it gets to work.

View Top 10 Insights from Cisco's IoE Value at Stake Analysis>>

CISCO™

Training Comes In All Forms

AN INTERVIEW WITH MATT SCHNEIDER, OPERATIONS DIRECTOR, U.S. PUBLIC SECTOR COLLABORATION, CISCO

In the past 40 years training has undergone a complete transformation. No longer do employees leave their jobsite for a week to attend trainings. Rather, employees are being trained through a variety of methods like digital collaboration tools, distance learning, online trainings, and mobile offerings. The reason for this transformation is crystal clear: the increased cost of in-person trainings.

"We all want to do training that helps us do our jobs better, but a week of travel to a site to attend a training isn't feasible," explained Matt Schneider, Operations Director, U.S. Public Sector Collaboration, Cisco. "Training has to be available and can't interfere with productivity."

But in order for a virtual training to be productive, the technology and the learning atmosphere must work effectively. That's where Cisco comes into play, as they have created a suite of collaboration tools to make trainings feel like they are taking place in your living room.

"We developed the living room concept because we want users to feel comfortable in the training environment," said Schneider. "We want people to be able to ask each other questions, engage with the trainers and have a strong connection. If you don't have the right technology, you are basically listening to a podcast; you are not in a learning environment."

Collaboration tools are also helping add value to the training experience. "Trainings work best when there is a tie to the community both beforehand and afterwards," said Schneider. Now users are able to access course documents, chat with one another and share resources outside the official training hours. "The tools allow agencies to incorporate training to be truly part of what we do day in and day out to better ourselves in the public sector space."

Cisco is also using mobile to create universal trainings and increase availability. "The ability of the tools to handle training on a mobile device has allowed users to say, "I can be out in the field and I can stop at the Starbucks for an hour or two, then log in, listen to the training, participate in the training and still get the materials that I need to do my job. That is a huge move," said Schneider.

As many trainers understand, everyone learns differently. That's why Cisco has also been exploring agile virtual training. With an agile approach, a trainer is able to engage with a user in a way that will yield the best learning outcomes. "If you are not giving flexibility to the user, you are putting them in a situation where they're not only learning new materials but they are learning new technologies too. That can be scary," said Schneider.

The ability to be flexible and offer a wide variety of learning options is possible due in large part to the convergence of IT. "What that really means, in the training environment, is that an audio conversation, a web content conversation, a video conversation can all work together to create a repository for the users to take advantage of. Users don't have to choose," explained Schneider. In this model, the user selects the way they desire to consume information. But this can only occur when IT, business leaders and trainers are all working together to understand what kind of environment they must create.

The ability to chose a training platform that works best for you is also helpful because the nature of training is changing. "Training doesn't have to be a point in time activity. Training can be a formal or meetings that we all have on a weekly basis. Those meetings are a form of training too. With the video, audio and web conferencing, training cohorts are able to stay extend training," explained Schneider.

Whether you are in a formal training or a team meeting, for a training to be effective it has to engage the user. "When you say 'you need to sign up for four hours of virtual training,' you naturally lose that level of engagement, because four hours sitting in front of the computer sounds boring," said Schneider. "But when you say 'we have lots of training opportunities where we're going to meet actively and work through these events together over a number of weeks,' it sounds much more appealing. Collaboration tools make learning more exciting."

In the end Schneider said true learning moments happen when, "You can make training truly accessible to the end user and put them in the best possible situation to absorb the material."

PLAY #5: LEARN from the best in virtual training

Sometimes the best way to create an awesome training is to model it after other great trainings. The good news is that we already did the research for you! After reading this section you will know how North Carolina and OPM crafted their successful online training programs.

DR. JANE BOZARTH

E-Learning Coordinator

North Carolina Office of State Human Resources

NATHAN MERCER

Personnel Development Trainer

Office of Personnel Management

EXPERT #1:

Dr. Jane Bozarth is the E-Learning Coordinator at North Carolina's Office of State Human Resources. She is also the author of E-Learning Solutions on a Shoestring; Better than Bullet Points: Creating Engaging e-Learning with PowerPoint; From Analysis to Evaluation: Tips, Tools, and Techniques for Trainers; and Social Media for Trainers.

MISSION:

Part of the mission for Bozarth is to keep changing her training methods. "Five years ago if I asked people to tell me something they'd learned, I might get five or six hands up," she said. "If I ask that now, everybody in the room would raise their hand. The reason is learning is now so accessible. You can learn to knit or do rainbow loom or fix a tire on YouTube. If the furnace is broken, you are not going to take a class at the community college to learn how to fix it. You are going to look it up online, because you need the solution now and ideally you need the solution for free. I think formal training needs to pay attention to that trend. We can no longer say, 'This is the content we offer. You can take the course at this time and at this place.' People will go elsewhere to learn."

In this fundamental shift, the way people learn is only half the equation. The other half is who does the learning. A large portion of North Carolina's workforce is set to retire in the next five years. Those retirees will take with them years of institutional government knowledge. To preserve the knowledge base, Bozarth and her team have looked to YouTube for inspiration.

"We have this big gap in knowledge after one person leaves. For example, we had a woman who worked in worker's comp for 35 years. She knew that department inside and out. We knew she wanted to retire, so before she left we recorded sessions just with her using Adobe Connect," Bozarth said. "She walked us through her forms and situations. We didn't need to go build a custom tutorial for all of North Carolina to see. When the new person was hired, we had hours of worker's comp notes waiting. It worked really well."

CHALLENGE:

Creating clear expectations and guidelines is often the biggest challenge for Bozarth. "Sometimes a manager will come to you to create a course on measuring performance. But the real problem is he has hired a jerk and he needs to know what steps he needs to take to get rid of the person. Or a manager will suggest team building training, when it's not the team that's having a problem, but one or two individuals," she said. "In order for a training to work, the outcomes have to be clear from the beginning."

EXPERT #2:

Nathan Mercer is a personnel development trainer at OPM who specializes in teaching soft skills that can be applied to both work and personal lives. He is also the author of a new book titled How the Tortoise Became Fast: A Fable to Follow to Achieve Your Goals.

MISSION:

Mercer designs all of his classes virtually, so he doesn't have to worry as much about converting in-person content to digital. But that doesn't mean his courses don't have a human touch. To create his engagement points, Mercer uses a webcam and chat box. In some cases, he will allow his students to call in with questions or comments.

CHALLENGE:

Often in the online training world there is one trainer for all types of training. The same person is tasked with leading online sessions on budgeting, résumé building and cybersecurity implementation. For Mercer the highly technical topics can be a bit of a roadblock. "When you are forced to present on a topic that is really technical, it can be extremely difficult," he said. "I am lucky because I don't have to do many technical or regulations-based trainings, but I would think that would be the hardest thing. At times you'll see those presenters are really stiff because they don't want to say one wrong thing. Those are often the trainers that just read directly from the slides. That's when trainings can go off the rails."

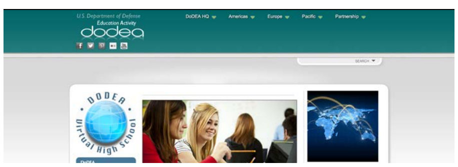
Specific design regulations for trainings can also be troublesome. "When I was a trainer at the [Veterans Affairs Department], they told me, 'You cannot use animation in your slides.' They had very specific guidelines for how a training should look. I find that way of training to be a little limiting," Mercer said.

So you've heard from some of the best virtual trainers out there. But we also wanted to show you some of the best virtual trainings in recent years. In many ways, one of the best things about government is there is no competition among agencies. They can grow and learn from one another without stepping on toes or patents.

3 GREAT FEDERAL TRAININGS:

GSA SMARTPAY TRAINING PROGRAM

In 2014, the General Services Administration-led conference went virtual for the first time. Registrants could choose from more than 100 online training courses and earn up to 14 Continuous Learning Points.



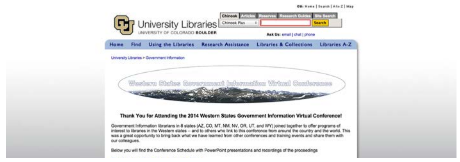
DEFENSE DEPARTMENT VIRTUAL HIGH SCHOOL COURSE

The instructional program provides a comprehensive grades nine through 12th grade curriculum that is dedicated to attaining highest achievement for all students. Students consistently achieve high scores in the National Assessment of Educational Progress and above the national average on standardized assessments.

FEDVTE

The free online Federal Virtual Training Environment is open to federal employees who want long-term cybersecurity training.

3 GREAT STATE TRAININGS:

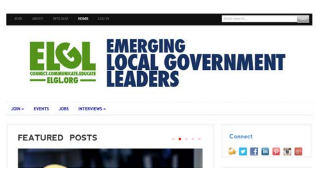


WESTERN STATES GOVERNMENT INFORMATION VIRTUAL CONFERENCE

Government information librarians in eight states (Arizona, Colorado, Montana, New Mexico, Nevada, Oregon, Utah and Wyoming) joined together to offer programs of interest to libraries in the western states — and to others who link to this conference from around the country and the world.

WISCONSIN'S GOVERNMENT ACCOUNTABILITY BOARD ELECTION TRAINING WEBINARS

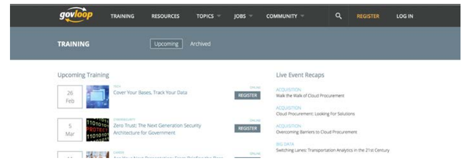
Every election cycle it seems like there is a litany of paperwork that needs to be filled: Donor forms and pre- and post-Election Day tasks, for instance. But Wisconsin now has a repository of online trainings to make sure everything gets done.



EMERGING LOCAL GOVERNMENT LEADERS SUMMIT

A one-day online conference that brought together ultra-engaged community leaders from 20 states to talk about how to move cities forward.

LESSONS FROM THE PRIVATE SECTOR:

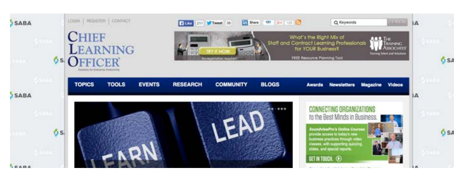


GOVLOOP ONLINE TRAININGS

Last year, GovLoop hosted more than 40 free online trainings on a variety of topics such as big data and how to get a mentor. More than 30,000 people took GovLoop trainings in 2014.

THE WORLD BANK'S E-INSTITUTE

This unique global portal is designed to support self-motivated learners who want to get up to speed on the latest development trends, enhance their skills and share knowledge through online learning communities.



CLOMEDIA.COM

The site is a hub for learning professionals. It features trainings on a variety of topics including leadership, learning delivery and performance management.

FHWA's "Leap Not Creep: Accelerating Innovation" Social Learning Experience with GovLoop

Due to the success of GovLoop online trainings, we decided to double down on training and stand up a team of learning designers that work with agencies under contract to convert their in-person training to innovative, engaging online experiences. One of our recent projects was with the Federal Highway Administration (FHWA).

As part of its Every Day Counts (EDC-3) initiative, FHWA's Center for Accelerating Innovation worked with GovLoop to deliver its "Leap Not Creep: Accelerating Innovation Implementation" course entirely online. In short, this was the course's evolution:

- EDC-1: Course participants attended two days of classroom-based training and an in-person retreat where innovations teams created their implementation plans together.
- EDC-2: This encompassed roughly four hours of webinar-based content and one day of in-person training.
- EDC-3: The entire course occurred online via the support of web-based technologies and learning engagement services by GovLoop.

AUDIENCE

The audience for EDC-3 included more than 97 participants from the federal Transportation Department and more than 20 state departments of transportation and municipal organizations. They were assigned to seven innovation teams.

STRUCTURE

GovLoop designed the course using a social learning approach that engaged participants in the following learning activities:

- 60-minute live webinar sessions led by FHWA instructors introducing key concepts and facilitating live discussion followed by 30 minutes of group work and planning time.
- Resources or videos provided by FHWA, mostly including DOT case studies and examples.
- Asynchronous online group discussion framed around both the live session content and the article/video content.
- Structured group activity where applied concepts to the co-creation of the each innovation team's implementation plan using an embedded wiki.

Lastly, the course was delivered using an agile learning design. Each week, the course was evaluated and adjusted as needed based on instructor and participant feedback.

RESULTS

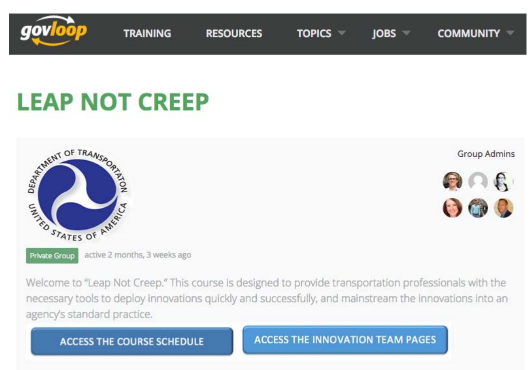
Ultimately, participants gave the course high marks:

- 93 percent of course participants either agreed or strongly agreed that the instructors were effective in sharing course content across the seven weeks.
- 82 percent agreed or strongly agreed that the level of interaction kept them engaged.
- 84 percent believed the content was valuable in helping their team complete its implementation plan.

Moreover, participants called out many of the engaging elements that we've discussed in this guide:

- *"Today's webinar was very beneficial, especially the question and answer periods. It helped to clarify a lot for me and develop a mental plan for going forward."*
- *"The examples were both good to see and good to examine for each aspect, and increased learning."*
- *"I liked being able to see the instructor. It helped me feel like I was in a real classroom. I also liked the length of webinar. Just enough time. I also liked being able to participate during the chat pod."*

That last comment — "It helped me feel like I was in a real classroom" — is what you want to achieve in an online learning experience. We know people would prefer in-person sessions, so replicate that sense online.



PLAY #6: taking virtual to the NEXT LEVEL with DoD

There are virtual games and then there is the military's use of virtual simulation. For the past 10 years the military has been leading the federal government in the growth in reliance on virtual simulators and constructive simulations.

Behind the Simulations

One of the leading experts in the field of military modeling and simulation for training is Lieutenant Colonel Walt Yates, the Program Manager for Training Systems at Marine Corps Systems Command. Lt. Col. Yates has been working in the virtual environment for more than ten years.

Historically, the Marine Corps has conducted most of its training in the live environment with real Marines and real equipment in the field. Live training is incredibly expensive and resource intensive, but it's also very effective. "If you had unlimited time and resources, you would probably choose to do most of your training in the live environment," Lt. Col. Yates said.

Unfortunately, the military has neither unlimited time nor unlimited resources. And it's running out of land to use for training.

The geographic dispersion and reach of a Marine Air-Ground Task Force (MAGTF) in actual operations may cover in excess of 1,000 square miles. "Increasingly we come to rely upon simulations to supplement the space and resources issue," Yates added.

Integrating live, virtual and constructive training allows us to train the whole gamut of a MAGTF's combat systems and elements. The Marine Corps task-organizes to deploy forces in MAGTFs of varies sizes.

MAGTFs typically consist of four elements: command, ground combat, aviation combat and logistics combat. To gather all of those Marines to train in a contiguous area of training ranges is hugely expensive and time-consuming.

"What we can do effectively by integrating live, virtual and constructive training is to create the impression to a commander and his staff that they are really, truly commanding and controlling a large force of Marines, spanning the warfighting functions of C2 (command and control), maneuver, fires, intelligence, logistics and force protection," Lt. Col. Yates said. "In reality, there may be only a small portion of that number actually in the field with live equipment and the remainder of it is simulated. Put all of those pieces put together and it gives the staff the realistic picture of a large unit of Marines, sailors, soldiers and airmen training in a joint battlespace at a fraction of the cost."

Definitions

LIVE TRAINING
Real Marines with real operational equipment, training in the field. They're firing real weapons and ammunition at artificial targets.

CONSTRUCTIVE SIMULATION
Simulated Marines operating simulated systems. In this battle simulation, Marines would issue commands and the computer entities in the simulation would carry out those commands.

VIRTUAL SIMULATION
Real Marines training with simulated equipment. A virtual simulation could be anything from a first-person shooter video game to a flight simulator.

Two Types of Simulations

There are two forms of simulated training: constructive simulations and virtual environment simulations.

Constructive simulations involve a computer simulation representing the actions of computer entities. It's a battle simulation in which the Marines who are being trained would issue commands. The computer entities in the simulation would then carry out those commands.

In a virtual simulation, real Marines train with simulated equipment. That could be anything from a laptop virtual simulation such as a first-person shooter video game to a full-motion aviation or ground simulator with actual physical control in a cab or cockpit. "Our tools focus more on the realism than the special effects of commercial video games," Yates said. "A flight simulator, a driving simulator, a gunnery simulator are other examples of a virtual environment simulator where you have Marines using simulated equipment. The simulations provide them the same type and fidelity of information or sensory stimuli that they would get in the operating environment."

The simple recipe for building a good virtual environment simulator is to map all of the sensory stimuli present in our understanding of the real operational environment into the virtual environment. These stimuli include sights, sounds, smells and tactile-haptic feedback, such as vibrations from a vehicle, the resistance in a steering wheel or brake pedals, or the feel on a cyclic or collective in a helicopter.

"If I can see, hear, feel and smell all those things that I would have in an actual environment, I can make decisions and take actions in that simulated environment that are fairly close to what I would do in the real world," Lt. Col. Yates said.

There is a saying in the field of training systems: Experience is a very harsh teacher because she gives the exam before presenting the material. "It means it's a lot less costly to crash a virtual aircraft than it is to crash a real one. If you're doing things that are particularly dangerous or hazardous, a simulator may be the ideal way to get that initial exposure and learn the basics," Lt. Col. Yates said.

In the past several years, the Marines have demonstrated the power of virtual simulations with their family of egress, or exit, simulators.

"When a Humvee or a Medium Tactical Vehicle Replacement truck crashes or rolls over, especially one with heavy armor, you have a really hard time getting out of that vehicle," Yates said. "Each of the doors weighs hundreds of pounds. In some cases you have to find a way to safely get yourself and the other soldiers or Marines out of that vehicle even if it is on fire or if you are engaging with the enemy. We built a family of egress trainers that teaches Marines, soldiers and sailors how to egress from the vehicle after it rolls over."

Aviation and amphibious vehicles are also represented in the family of egress trainers.

The simulator trains how to egress from a helicopter landing on the water. Every time a helicopter crash-lands on the water, it rolls upside-down because all the weight is on the rotors and the engine is on top. The helicopter will flip and start to stink. As a result, the trainer also flips upside-down and starts to sink.

A few months ago, a Marine Corps CH-53E helicopter had to make an emergency landing in the Gulf of Aden in the Middle East. In the helicopter were 25 Marines and sailors. "Every single one of them walked away from that crash with only minor injuries," Lt. Col. Yates said. "A Marine officer aboard described in his after-action report that he had remembered and used his training in the egress trainers. As the aircraft started to go down, he remembered he needed to have his hand on the buckle ready to release it, but not until the aircraft stopped moving. He knew he could then swim for the exits and only then inflate the life vest. He knew you don't want to inflate the life vest while you're still in the aircraft, because then you're floating up against the top of a sinking aircraft. All of those things that you have to remember we had practiced in the simulation. Every one of those men and women walked away unharmed. Training systems can't entirely be credited for that success, but there's a great deal of satisfaction in the program office because we fielded a training simulator for an event that you hope never happens and everybody walked away from the mishap when it did."

The Marines also do training sessions for everyday, routine things. For the past 10 years, the Marine Corps and the Army have fielded virtual combat convoy trainers.

The Combat-Convoy Simulator puts Marines and soldiers in the position of being inside a truck, Humvee or other tactical vehicle in a convoy or mounted patrol. The Marines are inside the physical confines of a vehicle cab driving through a realistic representation of a specific geographic location. Surrounding the vehicle are eight screens and projectors overhead that provide a highly detailed view from the occupants' perspective.

"The Marines could drive around this virtual world and practice intra-vehicle and inter-vehicle communications and coordination of airborne sensors and fires with the movement of their unit. For example, they could call for surface fires, close air support or evacuate casualties. The simulator allowed the Marines to train as a team and perform all the routine tasks that take place during mounted operations," Lt. Col. Yates said.

What makes the simulator even more useful is that it is not a single-person training. "There was an entire team in the simulator," he said. "The driver, the vehicle commander and the gunner in the turret of the vehicle are all communicating with each other and with the other vehicles just like they would in combat. We have received feedback from the units after they returned from deployment talking about how tactics, techniques and procedures in the simulated environment really prepared them for the challenges that they faced on deployment in Iraq or Afghanistan."

Training for a Purpose

The first priority in assessing the value of a simulation-based training system is determining whether the training is effective. The second question is whether using it saves money. "Before we field any training system, we conduct a validation to make sure that the system that we've designed and are preparing to field actually has measurable positive impact on the skills that the trainees are developing," Lt. Col. Yates said.

The Marines use the verification, validation and accreditation process to make sure the trainees are learning the right skills and not developing the wrong habits. "We do not promote training simulations as a replacement or a substitute for live training," he said. "The case for using virtual and constructive simulations is to maximize the amount of learning within budgetary constraints before going to the live environment."

Virtual and constructive training are proven to help better prepare Marines for live training events.

To ensure that training systems are concurrent with the latest operational equipment being fielded, the Program Manager for Training Systems works closely with the rest of the Marine Corps acquisition community to ensure that whenever a vehicle or weapon system is improved or redesigned, the training simulations reflect the updates. "You don't want to have Marines training in a virtual environment on an old version of a weapon or equipment," Lt. Col. Yates said.

"Our Army counterparts in training systems acquisition have a motto: 'All but war is simulation,'" Lt. Col. Yates said. "If you're not actually fighting the enemy, it's all simulation of one sort or another. Delineations between the domains of live, virtual and constructive are mostly a programmatic construct and not truly a distinction of different ways to learn. What we seek to do is provide the best training experience possible. The three attributes necessary for successful training are that it must be effective, affordable and available to the people who need the training."

conclusion: A NEW CHAPTER in online training

As we have demonstrated with this guide, there is no silver bullet to make online trainings better. Creating effective and profound virtual learning takes time and effort. But if you put in the energy to craft great content, attract the right audience and measure the results, you can develop a truly memorable learning experience.

The good news is government is moving in the right direction. "Learning organizations are less and less limited by the capabilities of technology," said Adam Johnston, Senior Product Strategist at GovLoop. "The limitations we see now are much more about how we utilize the technology.

"As online trainers we have to create deeply personalized, high-impactful learning experiences for every learner," he continued. "The future of learning, particularly in the professional space, is all about contextualization. Neither content nor platforms will be static anymore — both will adapt together to meet the needs of each individual learner, and the context she finds herself in at the moment of engagement. We will start to see real, measurable impact from these kinds of learning experiences, because it will transform both organizations and individuals, and empower them to accomplish the great work they set out to do."

With an eye toward meeting the needs of every learner, GovLoop's online learning team has been working on more modular and video-based online learning courses. One of the courses, titled "Budgeting 101," mixes video of SMEs with animated PowerPoint presentations and interactive elements. The training videos are all part of our new GovLoop Academy, an online learning portal for government.

Response to the trainings has been very positive. One early user said, "The footage of the actual speaker mixed with the moving animations made the training far more compelling than 50 minutes of listening to someone talk over non-animated PowerPoint slides. Seeing the person really made me believe the material."

From one-room schoolhouses to virtual environments, learning has come a long way. Still, some challenges remain unchanged. Just as those early instructors had to create curriculums for varying ages and learning styles, today's online trainers must do the same.

We hope that this playbook will give you the confidence, structure and arsenal to make online training a true learning experience at your agency.

"Online training may not be perfect, but it does allow me to spread my wings and train in areas that otherwise I wouldn't be able to." **- GOVLOOP SURVEY RESPONDENT**

Worksheets to Help You Prepare for the Virtual Training Journey

1. Create a Learning Objective

For a training program to be effective, it has to have a statement of purpose. In the world of learning design, that statement is called a learning objective. Follow our three-step process to craft your own learning objectives.

2. Make a Robust Email Checklist

The average person gets more than 100 e-mail messages a day. Your notification about your training program needs to stand out in the noise. Follow our five-step checklist.

3. Build Your Virtual Training Team

A training is only as effective as the team that creates it. In this worksheet, match the training professional to the area of expertise to make sure you have a full learning roster.

4. Craft a Compelling Assessment

How do you know if the students actually attained any knowledge? Have them take a quiz. Follow our seven step plan to create a compelling assessment.

WORKSHEET #1

CREATE A LEARNING OBJECTIVE

For a training program to be effective, it has to have a statement of purpose. In the world of learning design, that statement is called a learning objective. Follow our three-step process to craft your own learning objectives.

STEP A

Use the following eight questions to guide you as you develop your objective.

- ☐ Does your statement clearly describe the type of training (i.e., teaching information, improving a skill or changing an attitude)?
- ☐ Is it realistic for your proposed audience, available resources and the length of time?
- ☐ Is it focused on one specific job-related task or knowledge area? Does the training tie to specific learning objectives, executive core qualifications or continuing professional education credits?
- ☐ Is it worded as a behavioral statement — something they must do, not just understand or believe?
- ☐ Is the statement specific and precise about what they are supposed to be able to do?
- ☐ Is the entire learning objective stated clearly, with no extra words?
- ☐ Can you measure it to determine if learners understood the material?
- ☐ Is anything missing?

STEP B

Ask a subject-matter expert (SME) to analyze your learning objective. How can it be improved?

STEP C

If necessary, rework your learning objective so it helps learners achieve the outcome you identified at the beginning of this exercise.

WORKSHEET #2

MAKE A ROBUST E-MAIL

The average person gets more than 100 e-mail messages a day. Your notification about your training program needs to stand out in the noise.

FOLLOW THESE STEPS TO CRAFT A WINNING E-MAIL:

- ☐ Treat your subject line as a top priority.
    a. Avoid terms such as “free” or “reminder” that will catch in spam filters.
    b. Make your subject line personal.
    c. Make it action-orientated.
    d. Keep it short — 50 characters or fewer.
- ☐ Don’t forget the pre-header text. This is the text that shows up on a mobile device right under the subject line. You can get in more information without having to lengthen the subject line.
- ☐ Make it easy and simple to register for the event. A registration button is often the best way to go. It should be big and clear.
- ☐ Make sure the body of your e-mail is clear and concise and explains why someone should attend. Convey why the training matters.
- ☐ Add additional resources, such as links to previous trainings or white papers, to give the e-mail a more robust look and feel.

WORKSHEET #3

BUILD YOUR VIRTUAL TRAINING TEAM

Although the roster could look a bit different depending on the type of online training you are constructing, three main players are typically involved: the moderator, SME and back-end support manager. Each person plays an important role on game day or online training day. Ask yourself who would do each job if your team were tasked to create an online training about mentorship, for instance. Match the responsibility to the expert based on the questions below. Indicate if more than one expert could handle a job

QUESTIONS

1. Who should craft the learning objectives?
2. Who should handle audio issues in the event of an emergency during the training?
3. Who should craft the content for the presentation?
4. Who should make speaker introductions?
5. Who should facilitate the Q&A?
6. Who should monitor/organize questions for the Q&A?
7. Who should reach out to subject-matter experts?
8. Who should write the introductions and speaker bios?
9. Who should handle social media advertising and/or registration?
10. Who should call speakers who are running late?
11. Who should handle logistics during the training?
12. Who should handle logistics before the training?
13. Who should not handle logistics?
14. Who should handle log-in issues during the training?
15. Who should administer poll questions?

CHOICES

A. Moderator

B. Subject-Matter Expert

C. Back-end Support Manager

WORKSHEET #4

CRAFT A COMPELLING ASSESSMENT

One of the easiest ways to figure out if students have attained knowledge is to test them. A short quiz can assess a learner's comprehension of the material. Quizzes are especially common for mandatory trainings and extended learning courses. So what makes a good quiz question? Here are eight directives to point you in the right direction.

DOES YOUR QUIZ MEET THESE CRITERIA?

- ☐ Provide clear guidelines for the assessment, including estimated time to complete and any additional resources your learners may need. You should also group questions with the same directions together.
- ☐ Match each question to a specific learning objective.
- ☐ Concentrate on the most important, critical content. Don't waste your learners' time making them learn trivia.
- ☐ Question difficulty should come from the content, not the wording. Keep in mind your learners' reading levels and avoid awkward wording.
- ☐ Keep a sticky note at your desk with these words on it: always, often, frequently, never, none, rarely and infrequently. Go through your questions and delete those words. Vague adverbs like these tend to confuse learners.
- ☐ Ensure that each question has only one correct answer.
- ☐ Prepare the answer key at the same time as the assessment. This helps you keep track of everything and make sure you've covered all topics.
- ☐ Test the assessment before giving it to your learners. You want to make sure it makes sense and doesn't contain errors.

About GovLoop

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 150,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

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