

## **Simple to Complex – Evolution of Workforce Training in a Rapidly Changing Environment**

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### **ABSTRACT**

The challenge; a brand-new federal program called the Affordable Care Act (ACA) or also known as Obama Care. Our charge was to find, hire, and train 4,500 new employees for four (4) brand new processing centers in four (4) different states in about 3 months' time. To add to the challenge the systems, processes, and laws were all new, or non-existent and changing rapidly. The fluid component of this program hasn't stopped, and we continue to look for ways to deliver effective training that has an immediate need but a short shelf life.

The objective of this paper is to detail how we created a rapid Training development and delivery model that continues to evolve as the Federal ACA program matures. The training solution includes an innovative workforce development component where we have elevated the skills and abilities of an SCA mandated workforce and created expertise in healthcare policy and processing. The paper will demonstrate how we are utilizing real-time performance and quality data to target performance improvement training. And how we are utilizing a complex learning architecture to provide hands on, micro learning, and on-demand learning content. We threw away the book and created an extensive training program that involved basic job and workforce skills, social rules (e.g. emotional intelligence, customer service), as well as skills for tasks that were rapidly becoming more and more complex. This paper will tell the story of our journey and the challenges that were met along the way. Looking back, the Training component of this program has changed significantly from when we started in 2013 and continues to evolve as we face new challenges in workforce development and policy change.

### **ABOUT THE AUTHOR**

**Mike Thorpe** is a learning and development professional with over 25 years' experience designing and delivering learning solutions for various audiences. He has worked with Serco Inc, based out of Herndon, VA for the past 10 years managing learning contracts with Federal agencies including Health and Human Services (HHS) and United States Citizenship and Immigration Services (USCIS) among others. Mike has expertise in adult learning and development and brings with him experience in project management, Agile development, Software Development Life Cycle (SDLC), and Lean Six Sigma. Mike resides in Annapolis, MD with his wife and four-year old son.

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### INTRODUCTION

Serco contracted with the Centers for Medicare and Medicaid Services (CMS) in July of 2013 to be the contractor who will process the millions of expected healthcare applications submitted by the American public through the new Affordable Care Act (ACA). The program got a late start and we had just 3 months to prepare for an Oct 1<sup>st</sup> launch. We had to standup 4 brand new application processing centers, hire 4,500 people, and get them onboarded and trained to process incoming ACA applications in under 3 months.

Our challenges were many, we had to consider our environment and prioritize our training strategy to deliver the greatest impact. This paper will detail the four (4) main challenges we had to overcome in order to be successful. First up was to support a massive hiring effort and get new employees in the door, trained and ready to work. The second challenge was to create a curriculum that was flexible and could be modified quickly and easily as our environment was changing rapidly. Our third challenge was to put into place a development model and framework that flexed with the program and had multiple feedback points. Our fourth challenge was to mature our training metrics and enhance our ability to understand the past and present learning environment so we could positively affect our future. We are now into our 6<sup>th</sup> year as we continue to expand our capabilities and can target problems, support operational swings, and absorb new products, people, and policies.

This paper will discuss the challenges we faced and how we overcame them. My goal is to share some of the strategies and tools we used to help us succeed in hopes that these things may help others facing similar challenges.

### BACKGROUND

The Patient Protection and Affordable Care Act was signed into law by President Obama on March 23, 2010. More commonly known as the Affordable Care Act (or ACA) or Obamacare. Almost from the start the program faced challenges in getting off the ground. The program was handed over to the Centers for Medicaid and Medicare Services (CMS) a division of the Health and Human Services (HHS). For the next few years CMS working with various other Federal and State agencies and vendor partners planned for the launch of the program and its cornerstone Healthcare.com website on Oct 1, 2013. As you now know, things didn't start off well for the ACA program; *"Obamacare is not failing despite website woes"* – CNN Oct 2013; *"The Obamacare website failed for the same reason the Soviet Union did"* – Forbes Nov 2013; and *"Obamacare Website Failure threatens Health Coverage for Millions of Americans"* – Huffington Post, Oct 2013, *"Meet CGI Federal, the company behind the botched launch of HealthCare.gov"* – Washington Post, Oct 2013. Despite the well-publicized problems, the program was still moving forward, and we had three (3) months to launch, we had to be ready.

## CHALLENGE ONE – Mass New Hire Training

Build a training team from scratch, recruit and hire 4,500 new employees (including conducting background checks) and build an onboarding and training program for new employees. Find space to deliver the training (since the facilities were not open and ready) and do this on the road in four (4) states. It was a daunting challenge to say the least, and the toughest part was developing training for the systems and processes that didn't exist (at least not yet).

I know from experience that time is usually a luxury we don't have in the Learning and Development (L&D) field. These were some extenuating circumstances we hadn't faced before. I'm going to share how we broke down the challenge, developed a strategy and discuss the tools we used to onboard and train these new employees.

### Course Content & Schedule

We assembled a team of veteran Instructional Systems Designers (ISDs) and set forth probing our stakeholders to gain an understanding of the requirements. With no point to jump off from, we setup daily "exploratory" virtual sessions with stakeholder SME's to understand the skills needed to begin processing ACA insurance applications. We also had to work closely with our HR, Security, Facilities, Operations, and Systems Development teams as they developed their requirements, we needed to understand how to map those requirements to competencies in our new hire training.

Working diligently with each of those groups we created a two-week onboarding schedule with approx. 80 hours of content. We felt this would give us the rounded employees we needed to accomplish the task (see Figure 1). We covered topics such as Health and Safety, Affordable HealthCare-the Process and You, Quality Control & Best Practices, Telephone Skills, Consumer Care, and Application Processing. And because our employees would be exposed to consumer's private information (Names, Addresses, SSNs), there was mandatory Security and Personal Identifiable Information (PII) training included in this schedule.

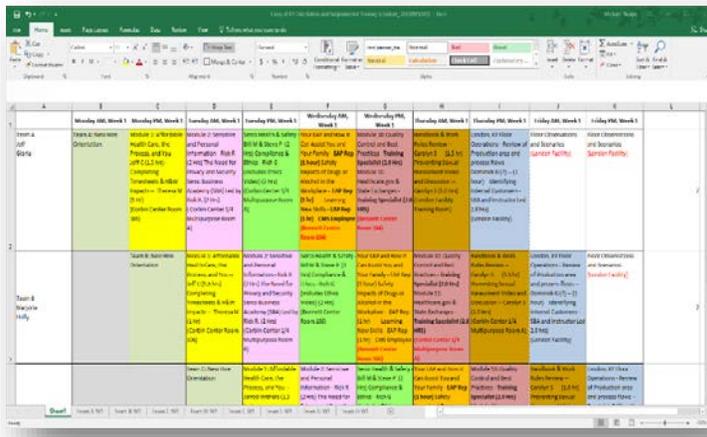


Figure 1 – Onboarding Schedule

Once we had the orientation schedule, we worked quickly to develop the needed courses in-time to conduct peer-reviews and run the content through our technical editors. Most of the courses were developed for classroom or Instructor-Led (ILT) delivery. We established templates for our classroom PowerPoints, and Instructor Guides (IGs), which included color schemes, font, and graphics standards.

While the content was being developed, we had to quickly recruit and hire trainers that would permanently occupy the production facilities. They were onboarded before everyone else so they could help with the massive New Hire delivery effort. Within 4 weeks we hired our initial training staff at our locations in Kentucky, Arkansas, Missouri, and Oklahoma. We shared our plans and course content with the new trainers in a series of Train-the-Trainer (TTT) efforts conducted remotely via WebEx and phone conferences.

## Logistics

We used a mix of local hotels, technology centers, and conference centers to support our deployment plan. We were facing the task of training 4,500 new employees within a two-week period. That worked out to roughly 1,100 employees per site. Our strategy included cutting the day into 4-hour ½ days and creating cohort teams of 50, with two trainers facilitating each team. We would start a cohort in the morning, and the next cohort would start that afternoon, we were adding 100 New Hires per day and it would take us at least 10 days to onboard everyone. This staggered start allowed us to maximize our resources of trainers and available training space. The cohorts would remain together for the full two weeks and keep the same trainers. This gave us some stability and helped us keep track of each employee.

## Implementation

We had finalized our materials and sent them to the printers who printed thousands of documents (PowerPoint course slides, sign-in sheets, evaluation sheets) and shipped them to our production locations. We purchased a series of portable projectors and screens to give us the mobility to train in most locations and conditions. Once we arrived onsite, we would locate our materials and equipment, do an inspection and note any missing items so we could get them replaced immediately. We had the usual issues; missing power cords, missing or damaged boxes of printed materials, burnt bulbs in projectors. If I had known I would have bought stock in Duct tape, because we used tons of it to secure cables to the floors, tape boxes, tape up or fix equipment.

We setup spreadsheets and documents to record attendance, collect feedback and suggestions for improving our program. But most what we did was paper based – sign in sheets with signatures to verify attendance, and paper-based course evaluations.

## Evaluations

Our stakeholder was interested in data and asked that we report back our progress. We had setup an end-of-course evaluation process to capture the participants feedback. We developed a Likert-based level 1 evaluation form with some open response questions, all on a two-sided piece of paper. We were going to distribute the evaluations at the end of each course so we could get feedback on the environment, delivery, course, and materials for every module and instance of it being delivered. When you look at it that is 1 evaluation per person, for each of the 12 courses. With 50 people in each team you were going to get close to 600 evaluations back per team, and we had 16-18 teams per site. Even with about a 60% response rate we were collecting over 5,700 evaluations per location. To keep on top of the mountain of paper we developed a web-based online evaluation system. But what we had to do was hand-key in each evaluation into this online collection system. We used an army of volunteers each day we were instructing that could sit there and key-in evaluations as they were delivered to them every hour or so. This process although tedious, did help us manage the evaluations and quickly view our data to adjust when and where necessary. After the entire New Hire event was over by the middle of November that year we had collected approx. 22,000 evaluations and could rate the satisfaction of each course, the average rating of each instructor, and were able to continuously update and improve our courses based on this experience and feedback.

## Lessons Learned

The truth is we ran into many unforeseen issues over the two plus months we were implementing. Some of the key lessons we learned include:

Assess early to identify unqualified individuals. We noticed quickly that some of the new hires didn't have basic typing or computer skills. So, we informed our HR/Recruiting teams to adjust their tactics and looks for better skilled

or qualified candidates where possible. We developed assessments that helped us identify struggling participants more quickly. Those that were struggling were supported to a point and then released if they couldn't meet the minimal skills requirements for the job.

Develop a checklist of your materials and equipment and continuously review this with your team each day so you catch and mitigate any supply issues that you will have.

Develop an Emergency Communications Plan (ECP). We had medical emergencies pop-up at our events, and we had to learn how to properly spot, and facilitate these issues, and when to call 911 and what to do while waiting for a response. This plan helped us get out of the way and get treatment professionals to those in need and minimize the disturbance to the other participants in training.

Organize into groups and keep a supervisor(s) with that group for the duration. Managing the thousands of new hires was a challenge as some decided to take advantage of the opportunity and skip a class or two or a day or two. We spend a lot of time making sure we were taking attendance multiple times throughout the day, with verified signatures for sign-in sheets. Having a single point-of-contact for each group helped provide stability and structure when dealing with hundreds of bodies at a time. The managing of people, that was the hardest part of this entire exercise and took much more of our energy and resources than I had anticipated.

## **CHALLENGE TWO – Curriculum Development**

We were faced with a big challenge; how do we keep up with the rapid changes of the program and continue to get critical information to our production audience. You could spend time designing and developing a course and have it overcome by events (OBE) within hours. There were a few occasions when we were delivering and would have to interrupt the sessions to provide updated guidance and training materials. Our credibility was at stake, we needed a solution that could get information to the point-of-need as fast as possible.

### **Instructor-Led Training (ILT)**

We were lucky enough to have some great technical instructors working on our team as our permanent site training staff. They were responsible for getting the content to approx. 1,200 staff at each of the four (4) production sites. What we had to do was setup a robust TTT process so we could get program info into their hands. They needed to be at SME level so they could pass that along to the production staff in the classroom. We used a variety of methods including using WebEx and eventually Skype for Business as our virtual web-conferencing tools. We were holding weekly and biweekly virtual sessions between our ISD developers and our site trainers. It was challenging, especially when the content was critical and needed to deploy quickly. We always prioritized our training staff to get them read-up on the information before we distributed to the site staff. This helped us tremendously to support the frequent process, policy, and system changes. It allowed our trainers to do what we called "floor support" in which they walked the production floor after a knowledge transfer and helped support the message as the staff worked thru the new changes.

## Electronic Performance Support System (EPSS)

On the eLearning side, one of the first things we implemented was a home-grown Electronic Performance Support System (EPSS). An HTML/XML based solution that could house our custom training content and serve it up to our audience quickly. This On-Demand capability allowed us to respond much more quickly to guidance and policy changes. Within minutes we could publish content directly thru the tool to the processing workers' desktop. The EPSS housed guidance documents like Quick Reference Guides (QRGs) and step-by-step Work Instructions. We also built in reference materials such as the USPS Zip Code finder, Area code look-up tables, definitions and acronyms (see Figure 2) for those making outbound calls. Our EPSS doubled as our training delivery platform and pushed out a variety of training products (see Figure 3). Our EPSS could support Flash, PDF, and most audio/video formats so it was ideal as a point-of-need solution.



Figure 2 - EPSS

## Content Types

In support of our instructor-led capability we had to have a robust library of eLearning content. We found that using the EPSS to support our training delivery was an excellent way to help with content distribution and knowledge retention. Our strategy was build small, quick, and effective. We built Micro modules into the EPSS that were developed using Captivate (ver. 8 -2019) with our custom templates. We had the need to create items called Training Flashes (TF), which is time sensitive material that had to get to production hands as soon as possible. We delivered over 80 TF's in the first year, 135 in year two, and continue thru today. We used Knowledge Checks (KC) as team activities to reinforce a message or process. Micro video modules, watch and participate web-based simulations, and traditional WBT modules. This content was pushed out to the EPSS where production staff could have the EPSS side-by-side with the production tools. It was highly effective to give the employee an on-demand set of materials they could use to "refresh" their knowledge or to help them with difficult processing tasks.

## Lessons Learned

Our program was getting more complex as the days and weeks went by. As you can imagine new systems were being developed and pushed out frequently, new policy was coming out daily changing the way we had to work. We were throwing hours of training at them day after day. Training fatigue was a real problem. In reviewing the feedback and watching the employees struggle it was obvious we needed to do more. Some of the feedback we got showed staff found it hard to understand the "why" in their work. We were so busy trying to push out the "how" and what" that we didn't bother with providing context. So, we created high-level workflows, that that helped explain the entire process from a different perspective. This gave the production staff a greater understanding of **why** they were doing what they were doing. We built the workflows in Flash and put them out on EPSS as interactive training. We immediately noticed a room full of lightbulbs over hundreds of heads! This helped them grasp the context of the work they were doing, which gave them the ability to better implement the learned skills. We saw an immediate improvement in our quality scores. Going forward we made sure we gave the "Why" in all our training.

### CHALLENGE THREE – Rapid Development and Prototyping

Working in a fast moving and constantly changing environment meant your leaning had a short shelf life. Almost all our courseware was custom and had to be developed from scratch. We needed to find a process that helped us create our content quickly and get it down to those doing the work.

#### Rapid Learning Model

Our group had always followed the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model and were very familiar with deploying content in that model. We learned quickly that ADDIE wouldn't fit in this environment and we couldn't spend the "normal" development hours on a course. Our strategy became to use Micro Learning with a custom Rapid Learning Model (RLM) (see Figure 4). Our goal was to quickly produce courseware that was effective, but we didn't invest a good chunk of time in the development phase. Although we use a variety of learning/delivery options, most of our content was designed for, Instructor-Led (ILT), Web-Based (WBT), and simulated exercises.

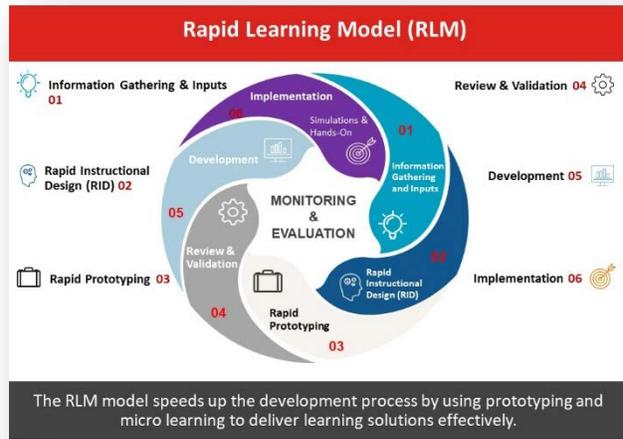
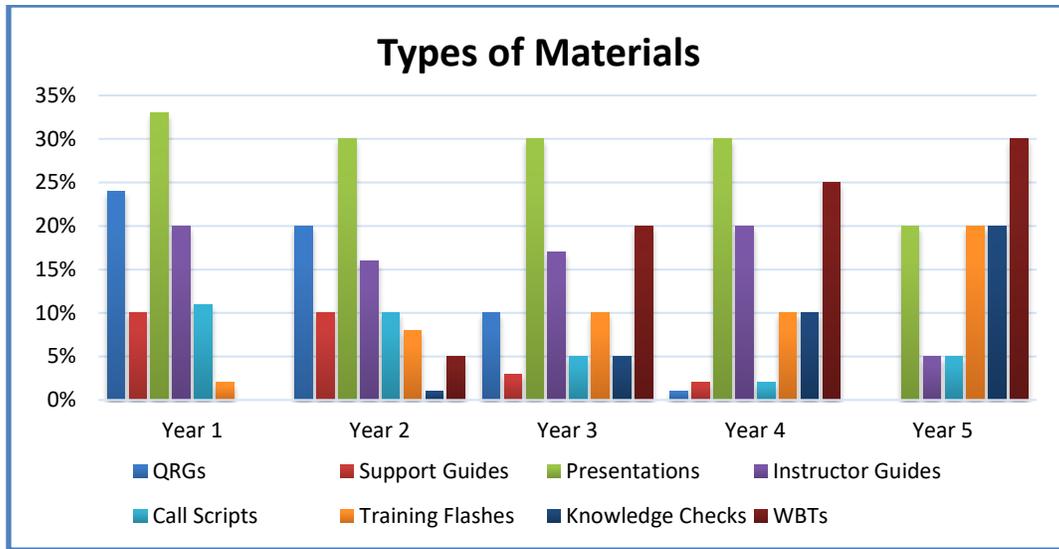


Figure 3 – Rapid Learning Model (RLM)

To speed up the development process we created a series of templates that helped our ISD team focus on the content. We created PowerPoint templates, and templates for instructor guides, participant guides, Train-the-Trainer process, graphics, tech edit, and WBT interactive templates. These templates already had the color schemes, graphic art, and coding embedded within them, making them plug-and-play for our team. All of this was stored it on a SharePoint site for easy access for a dispersed team.

In the first program year, we developed over 2,600 pages of materials (see Figure 4), most of which were Quick Reference Guides (QRG's) and PowerPoint presentations. As the program matured and the complexity of the work increased our support continued to ramp up. In program year two we created over 8,583 pages of materials, and in program year three, 11,632 pages. You can see the micro learning trend towards tools like WBTs, training flashes and knowledge checks as the program matured year over year.



**Figure 4 – Types of Materials Developed**

### Prototyping

With time not on our side, we didn't have a lot of room to make mistakes. We needed to get the training right the first time. Our way around this problem was to build in a rapid prototyping step with all our products. We used storyboards to describe the product and then reviewed them with the product owners and our stakeholders. We put the storyboards into Captivate and created short modules with basic interactivity and animation with very little programming/development effort. The RLM templates had all the coding and components we needed embedded within the storyboards. So, a meeting with a stakeholder or Subject-Matter Expert (SME) could produce a prototype module within hours and allow our stakeholders the chance to review and approve or provide feedback. Prototyping allowed us to test out the content and give the stakeholders something to validate. Once we worked out the feedback and gained approval we moved onto full development. This significantly sped up our development times and helped us achieve greater acceptance upon release.

### Lessons Learned

Moving to a Rapid Learning Model really helped us keep pace with the gusting winds of change. The item that saved us the most time and effort was creating the development templates. By using the templates with pre-set styles, colors, graphics, and coding we reduced time on the backend in tech editing and publishing.

Prototyping was also key for us in this program and helped our stakeholders fully understand the content we were producing. In many cases a prototype was created, and it wasn't what the stakeholder understood was being developed. That saved us days and weeks in development time by learning up front and adjusting our approach or message in the learning. I believe any programs where you are under a great deal of change, instituting a prototyping step in your development process can really pay dividends. Time is the most precious resource we had and wasting any of it would be hard to recover from.

**CHALLENGE FOUR – Evaluation and Feedback**

The critical component to operating in this very fluid environment was a robust evaluation and feedback mechanism. We needed metrics or data on our learning strategy and infrastructure, and we needed to be able to react quickly to this data when problems arose. Add to that stakeholders that were hungry for data and wanted to see performance metrics with increasing frequency.

**End of Course Evaluations**

We tied every piece of training to an electronic delivery of our Level 1 course evaluations. Of course, when I say Level 1, I am referring to Kirkpatrick’s four-levels of training evaluation model (Kirkpatrick, 1994) to measure effectiveness of the training. Our evaluations measured the participants experience in/with the classroom, instructor, and the materials. We used a 5-point Likert scale questionnaire with a few opened ended qualitative questions. At the end of each training session (ILT, WBT), participants were directed to complete the questionnaires.

The purpose of the evaluation was to:

- Determine if the training participants were satisfied with the training and had gained new knowledge or skills.
- Look for patterns that may suggest strengths and areas for improvement in the training.

We extracted the quantitative and qualitative data from the completed questionnaires and aggregated the data into a spreadsheet for review. The quantitative data was listed in columns for each ratable item.

I understood the learning objectives.	The order of the topics made sense to me.	I was comfortable with the length of the course.
5	5	5
4	4	4

**Figure 5- Extracted Sample of Quantitative data**

The qualitative data was organized in a column. If the training participant did not write a response or comment, then the cell in the column remained empty.

If you gave the trainer a fair or poor rating, why?	If you gave the course a fair or poor rating, why?	What topics presented today still remain confusing and/or unclear?	What other comments do you have?
Lack of enthusiasm	Training was for new hires		
Did not give poor rating	Excellent rating	All of it. I did get confused with all the acronyms. They all seemed to blend together.	All is clear
He went too fast	Too fast		

**Figure 6 - Extracted Sample of Qualitative data**

The data we captured in near-real time allowed us to analyze our performance course by course and instructor by instructor. We had dozens of courses being taught at multiple locations at the same time, this data gave us a barometer of how the delivery was going, site-by-site and allowed us to catch possible issues as they arose.

The data was malleable enough for us to create various reports that we could use to visualize the health of the training and share with our stakeholders. As we collected thousands of evaluations over the weeks and months, we automated our reports to calculate live Mean scores (Table 1) and added features like Heat charts to indicate big movers (+/-), highs and lows for our courses.

Course Title (n= the number of completed evaluations)	I gained new knowledge or skills by attending this course.	My learning was enhanced by the knowledge of the trainer.	I experienced minimal distractions during the session.	I will be able to apply on the job, the knowledge and/or skills I gained from this course.	The training materials used during the session helped reinforce my understanding of the course objectives.	I am clear about what is expected of me as a result of going through this training.	My overall rating of the trainer is:	My overall rating of the course is:	Overall mean
Active Shooter v1 (n=513)	4.7	4.7	4.6	4.7	4.7	4.7	4.7	4.6	4.7
ACA and You v4 (n=495)	4.7	4.7	4.5	4.6	4.6	4.6	4.6	4.5	4.6
Business Ethics v3 (n=509)	4.5	4.5	4.4	4.6	4.5	4.5	4.4	4.3	4.5
Del v5 (n=333)	4.5	4.5	4.4	4.5	4.5	4.5	4.5	4.4	4.5
EI v2 (n=449)	4.6	4.6	4.5	4.6	4.6	4.6	4.6	4.5	4.6
Employee Hdbk & Policies v6 (n=391)	4.6	4.6	4.4	4.6	4.5	4.6	4.5	4.4	4.5
Getting Started v5 (n=482)	4.6	4.6	4.5	4.6	4.5	4.6	4.5	4.4	4.5
Intro to OBC v1 (n=481)	4.6	4.6	4.5	4.6	4.5	4.6	4.5	4.4	4.5
Safety Orientation v2 (n=526)	4.6	4.6	4.5	4.6	4.6	4.6	4.5	4.4	4.5
Security Awareness & PII v1 (n=528)	4.6	4.6	4.3	4.6	4.5	4.6	4.5	4.4	4.5
Working Paperless v1 (n=391)	4.6	4.6	4.5	4.6	4.6	4.6	4.5	4.4	4.6

**Table 1 – Mean scores of onboarding courses**

### Performance Improvement

Performance improvement—also sometimes known as human performance technology—describes any systematic, data-driven effort to identify problems in work performance and develop effective solutions. Solutions may entail changes to a business process, technology, supervision, rewards, and training, depending on the underlying cause of the performance problem.

Production data is collected to identify performance issues that could be improved by implementing a training solution. For each product area the staff performance is reviewed against a checklist of quality questions. Each week, the

training team reviews the pass/fail percentages to assess the types of cases where errors have been made and opportunities for improvement may exist.

Our Performance Improvement program will spot trends (positive or negative) in performance and in many cases identify the teams or individuals who made repeat errors. The performance improvement strategy can vary depending on the complexity and scope of the errors. Our strategy may be to simply notify supervisors of the staff producing the errors and coach those individuals. Or if the problem is more widespread, we may release a training flash, knowledge check, or create some other targeted training.

### Lessons Learned

Creating a robust feedback loop for your training is a critical component of your learning architecture and should not be skipped or minimized. As we matured, we anticipated our stakeholders would want to see real data, metrics, and performance data. We built in multiple feedback points in our learning development, delivery, and monitoring model and used that data to help us grow. I can't stress enough that learning programs today need to have data to support their strategy and delivery.

Our ability to incorporate performance data and tie it to learning has really been a big hit for our stakeholders. By communicating where we are, what we are struggling with, or succeeding at, gives our stakeholders the feeling of being involved. It's a lot like the mechanic bringing you to your car and showing you where that squeaking was coming from, and what they did to fix it.

### SUMMARY

For large onboarding programs we found it best to create cohorts and assign training resources for the full length of the onboarding. Keeping these groups together helps improve the learning environment and stabilizes the communication for participants.

Watch for training fatigue. Too much training and constant change can create haze and reduce the effectiveness of your learning. Find ways to "push" content on-demand so your audience can "pull" when they need it.

Build in context to your learning. Don't fall into the trap of just hitting the objective. Give your audience a reason to learn, give them the "why" and not just the "what" and "how".

Pre-build your components so that styles, color schemes, language is set for your products and content developers (ISDs) can focus on the objective.

Prototype your learning content when and where possible, it will save you time in the long run. Prototypes make communication and feedback with your stakeholders much easier and reduces errors.

Put data into your strategy. The sooner you incorporate feedback points, and data points into your learning architecture the easier it will be to implement. With data you can monitor the health of your learning program and more easily communicate your success to your stakeholders.

Learning should not be considered a singular, unconnected event that happens only in a formal setting such as a classroom. Informal and continuous learning are important components as much as formal learning is. It is this author's opinion to be successful you must cultivate a system, or a culture that creates and demands continuous opportunities for learning.

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