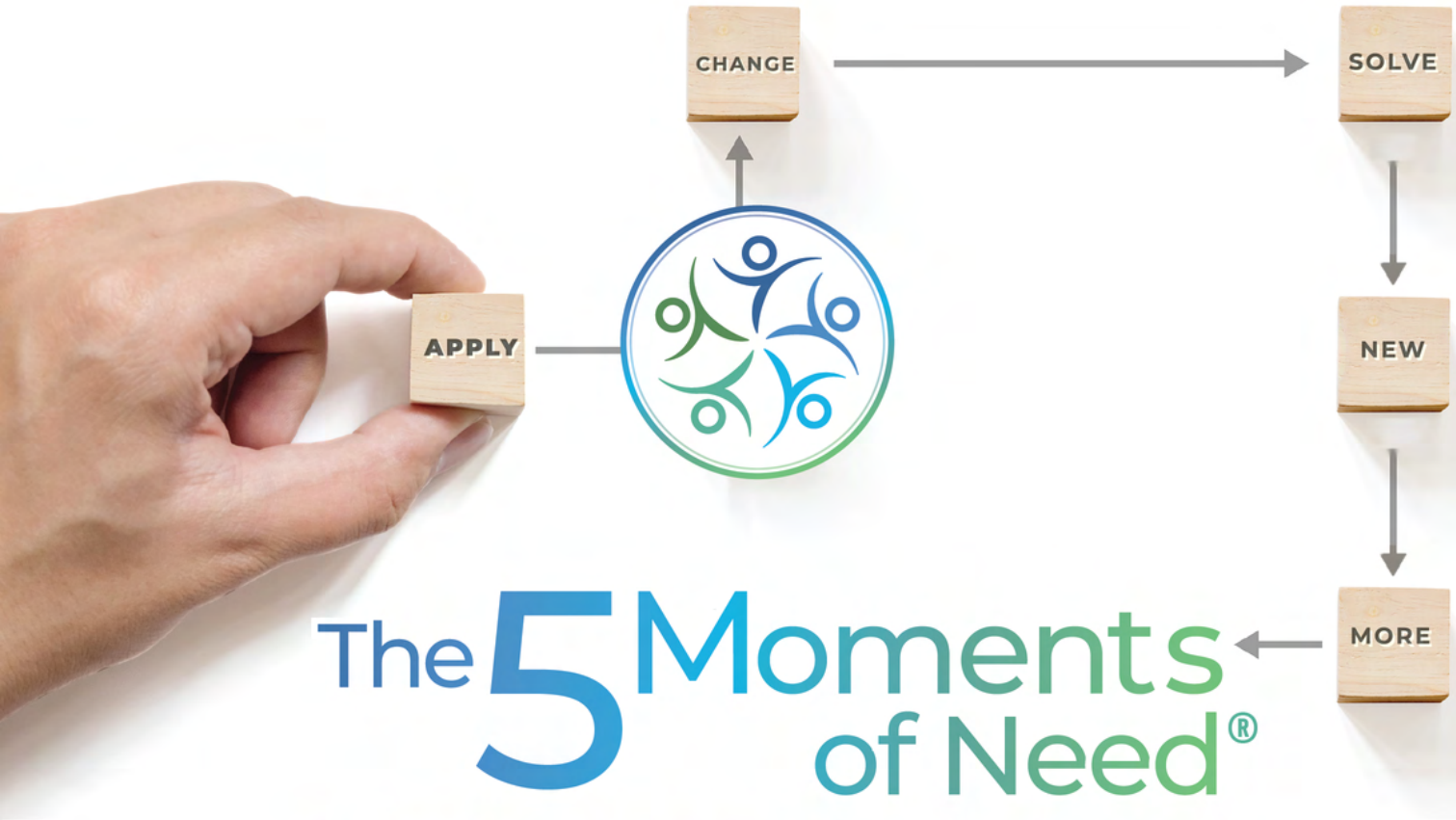

The 5 Moments of Need®

A Performance-First Approach

By Dr. Conrad Gottfredson & Bob Mosher

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FOREWORD

The principles, insights, and guidance provided in this book aren't just theories developed in isolation sitting behind a desk. They have surfaced in response to real-world challenges and been proven through real-world experience with help and direction from many gifted leaders and practitioners, who have become our great friends and colleagues in the process. Some of them have graciously provided some thoughts and encouragement to help you as you begin reading this book.

This is truly a landmark book on the 5 Moments of Need. It shares all of Bob's and Conrad's remarkable insights, best practices, and thought leadership on a performance-first/workflow learning approach. This book is a "must read" and will transform how you think about and reimagine learning and development. It will be a game changer for you and is already making a profound impact on our entire learning and development community.

- CHRISTOPHER R. HARDY, Ph.D.
Director, DAU

Bob and Con have gifted our industry a practical methodology enabling a sharp focus on contextual performance in our increasingly complex world of work. They are the true originators of what we refer to as "learning in the flow of work". I've been fortunate to spend time with both of these industry leaders and they are two of the most dedicated and passionate innovators I have met. I was introduced to the 5 Moments of Need in 2010 and it has become a key part of all my learning strategies. I highly recommend leveraging this book as a primer for how to advance a culture of continuous learning in your organization.

- BRANDON CARSON
Vice President, Leadership and Learning
Walmart

It is long past time for L&D – and is the right time for LXD (Learning Experience Design) – to pivot away from a topic orientation to a performance orientation. It's time to help learners prepare to perform tasks and produce outputs that meet stakeholder requirements back on the job. If not, why bother making the investment of shareholder equity in the first place? Help for learners might take the form of performance support if the performance context allows for a referenced performance response and does not demand a memorized performance response.

- GUY W. WALLACE

Performance Analyst & Instructional Architect
President, EPPIC Inc.

The 5 Moments of Need is the core capability your organization needs to develop to avoid both overload and under-recall of learning. It will enable you to analyze any role or manufacturing operation and optimize delivery of just the right information in the right context to drive performance – all while creating efficiencies throughout your organization.

- DHIREN DOSHI

Learning Partner, E2E Global Supply Chain
Colgate-Palmolive Company

The 5 Moments of Need has become our Rosetta Stone, helping us decipher our complex content ecosystem and organizational structures. This framework has empowered us to have productive, cross-silo conversations based on easily agreed upon foundations. It helps us avoid unnecessary conflicts and cut right to the chase: what's the right content for our customer at each moment of need, and who's the responsible for delivering it? The 5 Moments of Need has quickly gone from being a curiosity to a flexible and inclusive operating model. It focuses our efforts, reduces duplication, and accelerates time to market. What's not to like?

- CHRIS BLOCHER

Content Strategist, CXD
PDMS-D&M-XD-Fusion 360 family
Autodesk, Inc.

The approach of engaging learners in the workflow has proven to raise the value of my learning organization tenfold. In my experience, engaging learners in the workflow starts with a shift in culture for the learning organization. While it can be chaotic for some to embrace, it is important to create a world of autonomy for individuals to meet their moments of need while on the job. Learners who leverage workflow performance support are really creating the optimal "just right" experience, which increases their speed to proficiency faster than those who do not.

- MARK WAGNER

Vice President of Learning, Quality and Leadership
Claims
The Hartford

Conrad and Bob put a definition and methodology to a belief I've held for some time: the closer we get to where employees need help, the more chance we have of influencing how they work and the results they get. I've been frustrated by limited engagement in elearning and an inability to demonstrate value beyond "satisfaction" with face-to-face interventions. From a learning focus, the pivot to performance at the point where the work is done has been a revelation. In an industry that is obsessed by "better learning", Gottfredson and Mosher use their 5 Moments of Need framework to focus on what matters to employees and organizations, and from there make the difference that matters.

- DAVID JAMES

Former Director Talent, Learning & OD, The Walt Disney Company CLO
Looop.co

If learning and development is going to remain relevant, it must pivot away from the traditional. Developing a performance-first mindset and contextually designing in the workflow at the moment of application is how we make that pivot. Bob and Con are the quintessential leaders when it comes to workflow learning. They've given us the framework for the future of learning and performance support, and we need to listen and act!

- SCOTT SCHMOLDT

Associate Director of Training
UnitedHealthcare – Learning Solutions

The fact is that all of us forget most of what we read, hear, or learn. While the human brain is usually considered a memory device, it is actually a deletion device. We are constantly filtering out thousands of inputs and pieces of information and selecting what to retain. Bob and Con's 5 Moments of Need framework is a powerful tool that we can use to take advantage of how the brain and memory work. By anchoring learning to a moment of need, we can help a worker quickly learn what they need to perform. And we maximize the chances of retention through relevance and repetition.

- FRANK NGUYEN

Chief Learning Officer of Multiple Fortune 100 Companies

This is a confession of a reformed "sage on a stage". Throughout my career, students loved my courses and I never saw a vacant seat, but what did they return to work with? A head full of stuff and a book full of notes and no performance expectation. All of that gathered dust and led to little action. In 2016, that all changed when the 5 Moments of Need Certificate course shined a light on my flawed thinking. "Criticality" quickly became my mantra: identifying the difference between "nice to know" information and "required to act" performance solutions. Now, all content is developed and delivered with performance in mind. I owe the transformation to Bob and Con's willingness to share their experiences, knowledge, and tools.

- MARY RUTH BELL

Sr. Manager, Aftermarket Training & Performance
Performance Improvement Manager
Mack Trucks Academy
Volvo Trucks Academy

I had been working in Learning and Development (L&D) as an ID and ILT for 20 years. Stakeholders approved content for classes but were later less than satisfied with the results. A common refrain was, "If you taught them this, why aren't they doing it?" Then, I discovered performance support/workflow learning. By switching to performance-first as the paradigm for training, learners can focus on what they need to DO. Classroom time is now dedicated to (1) only what people need to know to do the job and (2) practice doing what will be expected of them on the job. Performance support is provided in the classroom and on the job to help bridge the knowledge from practice to performance. Not only are learners more satisfied with the learning experience, but stakeholders

witness staff doing what they have been taught. Learning is transferring to the job with a much shorter training blueprint. And as an L&D professional, I can see that the work I am doing is directly contributing to the success of the organization. I believe that workflow learning is the future of staff development and is key to an organization's success.

- MOLLY PETROFF, MEd, RN

Educational Services, Retired
Saint Vincent Hospital-AHN

The work that Bob and Con have done around the 5 Moments of Need has been instrumental for the Learning & Development space. We are so fortunate to have worked with them for several years on our strategies and approach to the development of our learning solutions. Their thoughtful approach and process helps ensure that the right solution is developed for the right audience at the right time. We have created both effective and efficient learning content for our customers using the 5 Moments of Need. In addition to the education and tools that Bob and Con have provided to us, they have also become great friends of the Southwest Airlines family. They are a joy to work with, and I am so grateful to have met them many years ago through the Masie Consortium. I look forward to continuing our partnership and am so excited for their new eBook.

- KRISTI OWENS

Sr. Director
SWA University

In 2004, Bob invited me to be a member of the Microsoft Learning Partner Advisory Board and we recognized that our visions were completely aligned. I introduced Bob to performance support technology needed to build powerful workflow learning and performance solutions, and Bob introduced me to the 5 Moments of Need framework required to design these solutions. At that time, Bob also introduced me to Con, and we decided to join forces, become business partners (and more importantly friends!) with the same passion to innovate Learning & Development in a big way!

- ALFRED REMMITS

CEO, Xprtise

I must admit, my shift to a 5 Moments of Need, performance-first approach was mostly selfish. After many years of designing "knowledge first" programs, I had grown weary of the post-event complaints from managers and customers that trained employees still "couldn't do anything", even though my smile sheets said they liked the course, and they all passed the knowledge assessment. Shifting to the performance-first approach had an immediate positive result: folks spent less time in training and could "do something" back on the job that was noticeable and recognized. And, more dramatically, the on-the-job behavior changes had a real impact on the business! Fewer errors, higher end-of-line quality, reduced employee turnover, fewer complaint calls, increased efficiency... the list went on and on. These were tangible, measurable business results with a direct connection to the bottom line. The shift to performance-first produced results that were significant and powerful. How do I know that? Well, because managers still call, but now they're asking for more.

- BILL HICKEY

Learning Design Specialist
Axalta Coating Systems
5 Moments of Need Certified Designer

The training profession is terribly broken, having become prisoner to administrative conveniences and deeply entrenched beliefs and practices that often don't withstand first contact with learning-related research, but somehow continue unabated. Our inflated sense of worth to the organization – that which insists upon a "seat at the table" – is matched only by our inflated sense of impact. Until we can reliably, repeatedly, and in sustained fashion provide direct evidence that training is moving the needle on individual and organizational performance, our value is defined only by how prominently we're featured as part of the overall employee benefits package.

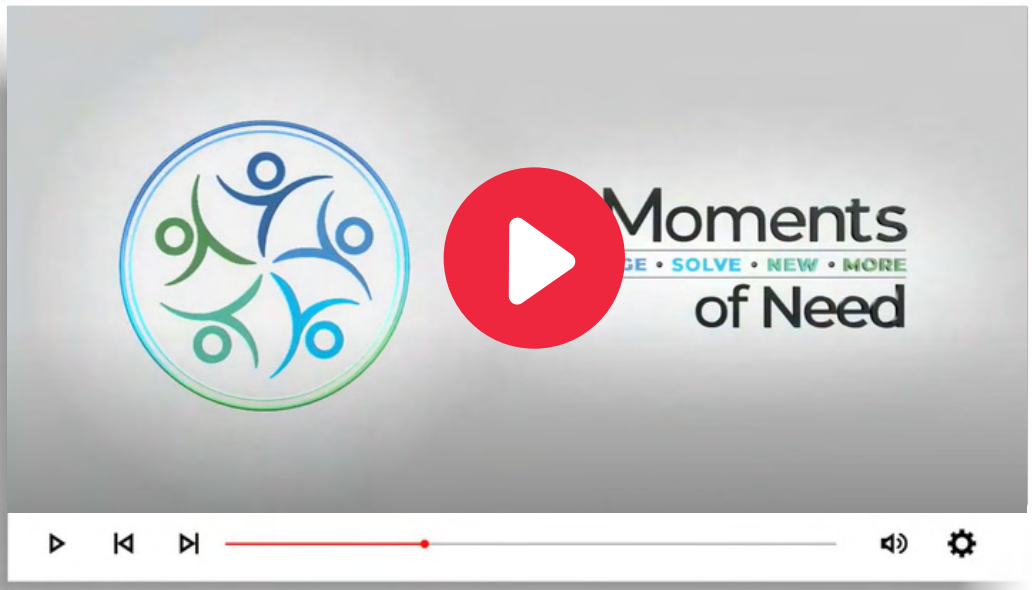
This book provides a viable roadmap to fixing that which is broken and being not only invited, but pulled into that seat at the table. Pursuing this path is far more challenging than dropping another pre-packaged iteration into that Monday-Friday from 8-5 slot, but also far more rewarding than you can imagine.

- SENIOR LEADER IN THE PUBLIC SECTOR

THE 5MON: A PERFORMANCE-FIRST APPROACH

INTRODUCTION

Welcome Video from Bob Mosher & Conrad Gottfredson:



Together, we have invested more than 75 years helping organizations around the world shift from a learning mindset to a “performance-first” mindset. Why? Because the primary mission of any learning initiative is to enable effective and efficient performance in the flow of work. We have learned that this can’t happen without performance support. Properly developed and orchestrated performance support enables learning while working. Notice the emphasis on the word “while”!

Some think that workflow learning is any learning that an employee does while physically in the workflow. Not really. Although organizations can make elearning and micro-learning available IN the workflow, learners are still required to stop their work to participate in those learning experiences. At some point, they must take the time to transfer what they learned to on-the-job performance. Leaving work isn’t always a physical thing. If you are sitting at your desk but required to mentally stop (leave) your work to find and consume a learning asset, you are NOT engaged in true workflow learning. Genuine workflow learning occurs while employees are performing the work they are hired to do.

The 5 Moments of Need framework (aka 5 MoN) lives at the heart of workflow learning. Suppose you need to learn how to do something that you have never done (Moment of New). You are in the flow of work, and you need to complete this task right now. Within 2 clicks, you access the specific steps for that task. You follow the instructions for each of the steps and you successfully complete your job task. During this Moment of Apply, did you learn anything? Yes. Performance support expert and author Gloria Gery calls this "unconscious learning".

Now, suppose the next day you need to complete the same task for a different work project. Within 2 clicks you are at the steps, but the situation is different and a bit more challenging (Moment of Solve). You access a decision tree that is referenced in the step instructions with which you are having some difficulty. You work through the decision tree and successfully complete the task. Have you learned anything yet? Absolutely! You are learning through experience. Let's say you complete this job task 5 more times over a period of 2 weeks. Each time the situation is a bit different. Every time you complete the task, in your flow of work as you do your work, you are gaining experience. This is workflow learning.

Clearly, not everything can be learned exclusively in the workflow. Some things merit being learned for the first time in the safety of a traditional training program. But even then, what was learned formally merits reinforcement in the flow of work to promote continuous growth and experience.

And then there is the Moment of Change, when performers with deeply rooted knowledge and skills need support in their flow of work as they unlearn outdated ways of thinking and doing to relearn new ways of thinking and doing. All of this constitutes workflow learning. Of course, there is much more to this – hence this eBook.

The chapters that follow are orchestrated from

the blogs, podcasts, and videos that represent the culmination of our own work and that of our respected colleagues who have joined us on the workflow learning journey. We will take you through why and how workflow learning will benefit your organization (and your learning function), clearly define what it is (and isn't!), provide examples of what workflow learning looks like in each of the 5 Moments of Need, explain the measurable impact of the 5 Moments of Need framework, and lay out what's required for successful implementation. We have also dedicated an entire chapter to stories, examples, and advice from the field. Nothing beats perspectives from "in the trenches"!

We hope this eBook will inform and inspire you to embrace all that the 5 Moments of Need and workflow learning can afford your organization – and you as a learning professional. Knowing that change is never easy, it's our belief that workflow learning is the change that every organization needs to make to succeed in today's ever-changing world. With that in mind, we invite you to consider one of our favorite quotes by a gentleman named Denis Pombrant:

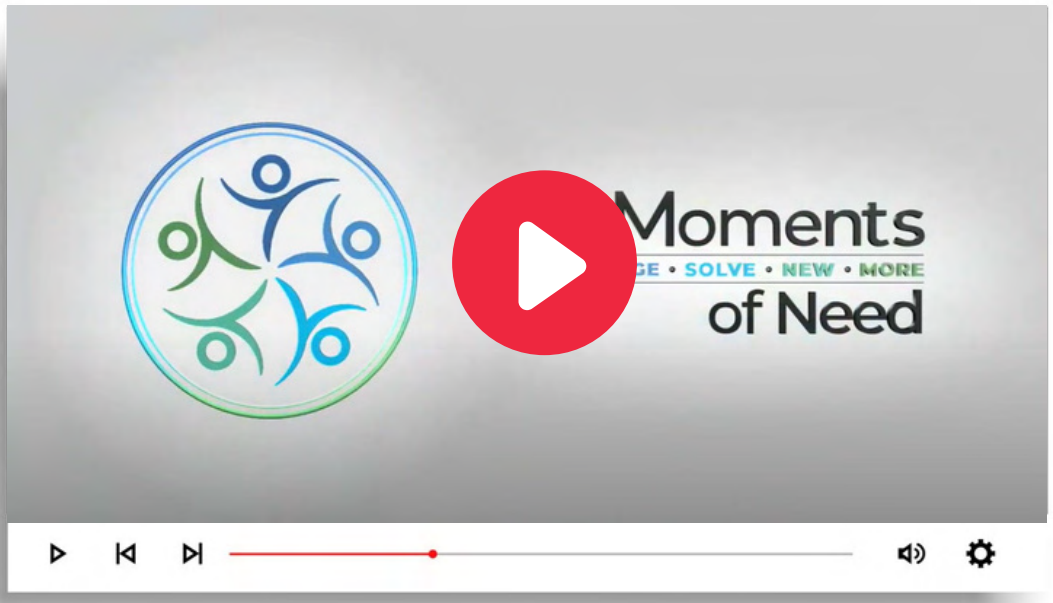
"Change is difficult. It's hard, and people avoid it when we can, but change eventually happens when the consequences of standing still look worse than the consequences of taking a chance on change... It's time for all of us to change–standing still is not an option, and we can only imagine the disruptions ahead."

Although learning is clearly a prerequisite for performance, to have learned does not always translate into or guarantee performance. This is one of the hardest things for training departments to understand. We have spent years and billions of dollars on classroom programs, elearning libraries, certifications, and compliance training only to find that we're still not getting the performance we need and want from our workforce. That's because we are missing a key component! We need to be offering an intentional instructional model that takes what someone has learned and helps them transfer and adapt that knowledge into their daily workplace. This is the job of workflow learning. Until an organization begins to create, deliver, maintain, and measure workflow learning with the same focus, budget, resources, and rigor it has always dedicated to traditional training, it will never truly realize the overall productivity and growth it has been tasked with achieving.

CHAPTER ONE

WHY EMBRACE THE 5 MOMENTS OF NEED?

The 5 Moments of Need is a framework that enables learning in the flow of work, while employees are doing their work. It guides the development of a performance support infrastructure that enables learning ahead of change and optimizes the business impact of traditional training. This chapter will clarify these and other organizational benefits and explore how the 5 Moments of Need framework specifically enables learning and development functions to overcome significant, persistent challenges – some that have prevented L&D from becoming a critical, strategic partner to the business. Click the play button below for a short video that shows our excitement about the value and power of workflow learning:



VALUE PROPOSITION OF THE 5 MOMENTS OF NEED FOR THE BUSINESS

As you read more in this chapter about what the 5 Moments of Need can do for an organization, keep in mind the key stakeholders you need to consider when making a business case, which truly is a change management effort. We have listed five stakeholder groups here (you may have more)

with a rough beginning of important messages for them about the benefits of 5 Moments of Need solutions specific to their efforts (these might help you make your case):

- Learning & Development: Effective job performance – every time, everywhere.
- Human Resources: Continuous performance improvement and accelerated onboarding.
- Managers: Workflow optimization and business impact measurement.
- Information Technology: Technology adoption and ROI.
- Leadership: All the above, plus speed of adaptive response to market changes, innovation, and engagement.

Now that you have your stakeholders in mind, here are some key elements for organizational success that the 5 Moments of Need framework enables and improves.

ORGANIZATIONAL COMPETENCY

It's no secret that today's business environment is uncertain and turbulent. This was true even pre-COVID, but in our current times and looking ahead, that uncertainty and turbulence is and will continue to be amplified. So, how can organizational competency be achieved when so much is changing so fast, and where does workflow learning fit in? Here, Conrad explores this issue in detail:

Organizations' need for a 5 Moments of Need infrastructure is even greater today because they are facing changes in their markets that are harsh and unforgiving. Most face an unpredictable, unrelenting, and unforgiving environment of change. The rate and magnitude of change in many markets is staggering. This climate challenges the competence of organizations at every moment of every day and requires that organizations have as a core competency the capacity and disposition to learn at or above the speed of change. Anything less than this puts an organization at risk. Since 2008, we've viewed first-hand the wreckage of organizations that made their way from good to great, only to crash because the ground moved out from under them, and they lacked the agility to stay on their feet. Today, disruptive forces of tsunami-like proportion can seemingly appear from nowhere (e.g., COVID-19) and wreak devastation upon an organization or an entire market because they lack the ability to get knowledge and skills to every employee in time for them to adapt their work to meet those changes.

The question is, how can organizational competency be achieved and sustained in today's turbulent business environment? This can't happen unless there is the means in place to ensure that the required resources are readily available to support optimal performance. Consider your organization and ask yourself these questions:

- How competent are we at remaining competent?
- To what degree is our organization in pursuit of this capacity?
- How effectively have we put in place practices and supporting systems to help our entire organization quickly learn and effectively apply the collective knowledge and skills of its members, and to grow, change, or innovate at or above the speed of the change?

High agility organizations can quickly learn and effectively apply the collective knowledge and skills

within and even beyond their borders. Collective knowledge and skills encompass not only what is resident and evolving within people, but also all that has been captured and stored along the way; then, made and kept useful in a form that is immediately accessible and adaptive to individual needs.

The growing dilemma is that organizations are long past the point where they can expect their people to acquire and retain what they need to know to do their jobs through formal training alone. To attempt to do so in today's environment is reckless.

Clearly, organizational learning agility is dependent on the organization's ability to capture, pool, and warehouse its relevant knowledge assets. But this is not all. The final step is to provide ongoing intuitive, relevant, and rapid access to those knowledge assets.

A 5 Moments of Need architecture represents the missing link between training and effective on-the-job performance. It's what gets individuals only what they need, in the form that they need, at the moment in which they need support.

Organizations must develop the means of delivering to their employees the commodity of immediate, intuitive, tailored aid that supports effective performance. Organizational competency is realized when everyone in the organization is performing effectively in their jobs at every changing moment of need.

A HIGH-PERFORMANCE WORKFORCE

Speaking of performance, achieving a high-performance workforce is likely on every organization's wish list, but the true challenge is maintaining that level of performance, especially in today's reality of constant turmoil. Conrad digs deeper into this challenge here, and explains why workflow learning is fundamental to maintaining a high level of performance:

You might say that if you create a high-performance workforce, the nature of these high performers will inherently ensure proper maintenance and adaptation of knowledge and skills. Not so. If you look under the hood of most discussions around "high performance", you will find this faulty prevailing view:

"A high-performance workforce is comprised of engaged employees that have the necessary skills and motivation to contribute to the growth of the business."

The word "have" shows the problem. It suggests that there is a point of arrival. Today, there is no such place: competency is a continuous journey. With all that performers need to know and do today, tomorrow, and next week, who can master it all and remain competent? Why should organizations even attempt this?

In 1932 Eric Hoffer described a reality of our global age:

> *"In times of radical change, the learners inherit the earth while the learned find themselves perfectly equipped for a world that no longer exists..."*

Clearly, Hoffer understood that learning isn't about achieving anything. It's about growing and adapting through continuous learning. Simply gaining mastery of "the necessary skills" may have been sufficient in a stable, slow-moving economy, but this view ignores today's realities. Clayton Christensen's book *The Innovator's Dilemma* describes a deadly path that organizations often take. They become lulled into a state of unfounded security because of remarkable "ongoing growth". They ultimately awaken one day to the reality that the market in which they have been constantly successful has changed and they're unprepared and unable to adapt to remain competitive. The result is catastrophic failure. Today, it is simply unrealistic to assume that employees will ever "have" all the necessary skills and attendant knowledge called for at any given moment. The marketplace is too dynamic to allow it.

A high-performing workforce must have the disposition to be ever-learning and ever-changing. And a high-performing organization must have in place the capacity to support that disposition and business need.

Adopting the 5 Moments of Need framework and designing workflow learning is fundamental to this capacity and includes everything an organization does to provide intuitive, tailored aid to its workforce at their moments of need to ensure the most effective performance (collectively and individually).

Employees' need to learn a new way of doing something because of change has been the least understood and most ignored need in workflow learning. Organizations will never achieve an agile

workforce without addressing it head on.

ADAPTIVE CAPACITY OF THE WORKFORCE

Only in the workflow can an organization intentionally develop the adaptive capacity of its workforce. Nothing in business is static, and learners must be able to learn, unlearn, and relearn how to do their jobs in constantly evolving ways. Here, Conrad further explores this concept:

It's estimated that 70 percent of all work skills become automated [Source: https://www.taylorfrancis.com/chapters/edit/10.4324/9780203868546-10/resistance-change-unconscious-knowledge-challenge-unlearning-richard-clark]. Unlearning automated skills to perform in a new way just doesn't happen in a learning event. Unlearning to relearn requires successful application over time (e.g., spaced repetition). This challenge of relearning how to perform in a new way is one of the primary reasons why most change initiatives fail.

When something about a performer's job changes, learning can only efficiently happen in the workflow. It's at that moment when people are most ready to "relearn", and an Electronic Performance Support Solution (EPSS) can meet that need within 2 clicks and 10 seconds.

This is why "reference" learning coupled with an EPSS is so vital. Any EPSS authoring software worth its salt will have strong knowledge management capability. Every performance support strategy must include content maintenance. As long as your EPSS remains trustworthy, learners will rely on it to remain competent in an ever-changing environment. Because there is an EPSS to support them, performers can redirect efforts they would have otherwise wasted on things like mastering skills during formal learning alone (if they are skills that can be safely performed on the job solely with the help of an EPSS), trying to transfer that formal learning to the workflow without EPSS assistance,

and maintaining competency with information scattered beyond the reach of 2 clicks and 10 seconds.

An organization is competent to the degree it performs effectively at every changing moment. This can't happen unless organizational knowledge is current, staff skills are constantly kept up to date, and required resources are readily available to support optimal performance. Workflow learning will enable your learning function to ensure that competence.

REDUCED TIME TO COMPETENCY

Every organization wants new and new-to-role employees up to speed and competent as quickly as possible. Workflow learning plays a significant role in that process. Our experience is that we can often cut time to competency in half with the development and implementation of an instructionally sound EPSS, which provides immediate, intuitive, tailored aid to a person at his or her moment of need to ensure the most effective performance.

Throughout the last 30+ years, it's been our experience that, on the average, half the skills in an organization's training curricula could be pushed out of the formal side of training (where employees have to stop their work to learn) into the workflow to be learned while they perform their work.

The discipline of workflow learning enables our ability to do this. An EPSS, or Digital Coach, is a powerful workflow learning deliverable. Here's what the strength of an EPSS looks like:

An employee is in the workflow. Her job requires her to complete a task she's never performed before and has had no training for. Within 2 clicks she accesses the quick steps for the task. She begins following those steps to perform the task. Step 3 seems a bit complex, so she clicks on that step to access greater detail. On Step 4, she needs to make a decision based upon company policy. She clicks on the policy link, which opens the corporate policy guide to the specific paragraph she needs to review. Once she completes all the steps, she clicks on a link that opens a checklist for her to review to make certain she has completed the task appropriately.

That example is most certainly a workflow learning experience. This capacity to push learning entirely into the workflow, reducing the time employees need to stop their work to learn, is transformational. It is in every organization's best interest for us to do this to the extent we can do so safely. Learners become familiar with the EPSS as they perform tasks, gaining confidence and contextual understanding with each activity they complete while using it.

PERFORMANCE IMPROVEMENT

Performance improvement is a critical benefit of workflow learning because where do performers improve? In the flow of their work! That is where they gain self-efficacy and become more engaged, both of which lead to more effective performance.

Engagement is a hot topic for many leaders. As Conrad explains, the challenge for leaders in most organizations today is that, on average, only 39% of their employees are highly engaged.

The remaining 61% are somewhere between frozen solid and thawing out. [Source: https://www.gallup.com/workplace/330017/employee-engagement-rises-following-wild-2020.aspx] The level of engagement influences the degree to which our efforts to train and support employees actually survives and thrives in the workflow.

Because change is rampant, employees must be dynamic learners with a disposition to be aggressively rapid, adaptive, and collaborative in how they learn. Only then will they learn at or above the speed of change.

Undergirding this is the disposition of employees to engage their inner drive to excel – to push and grow.

Employee engagement is a vital issue if we intend to optimize our investments in the 5 Moments of Need. Our success in the work we do requires engaged employees. We can build great solutions, but employees will choose what they will do with them. The good news is that education is a primary means for helping fuel this engagement.

When people successfully learn and apply new knowledge and skills, it fuels engagement. The highly engaged have a greater appetite for learning. They cultivate aggressive and self-directed learning habits. They are rapid, adaptive, and collaborative in how they go about learning because work environments are in constant flux. Learning at or above the speed of change becomes a personal competitive advantage and a powerful driver of engagement.

Beyond engagement, performers need real-world practice and the ability to fail safely to improve their performance. Here is a story from Conrad's personal life that exemplifies the need for both elements:

Recently our youngest son drove one of our cars through a large body of water that had accumulated in a parking lot following a massive rainstorm. As the cold water flushed up and around the heated engine, it stopped – for good.

We had paid for Jason to receive the best driver's education possible. He sat through all the classes, scored well on the tests, and did well in his "on-road" driving exercises. He qualified for his learner's permit, which allowed him to continue learning to drive while in the flow of traffic. The permit required that he always be accompanied by an experienced driver to provide on-the-road coaching.

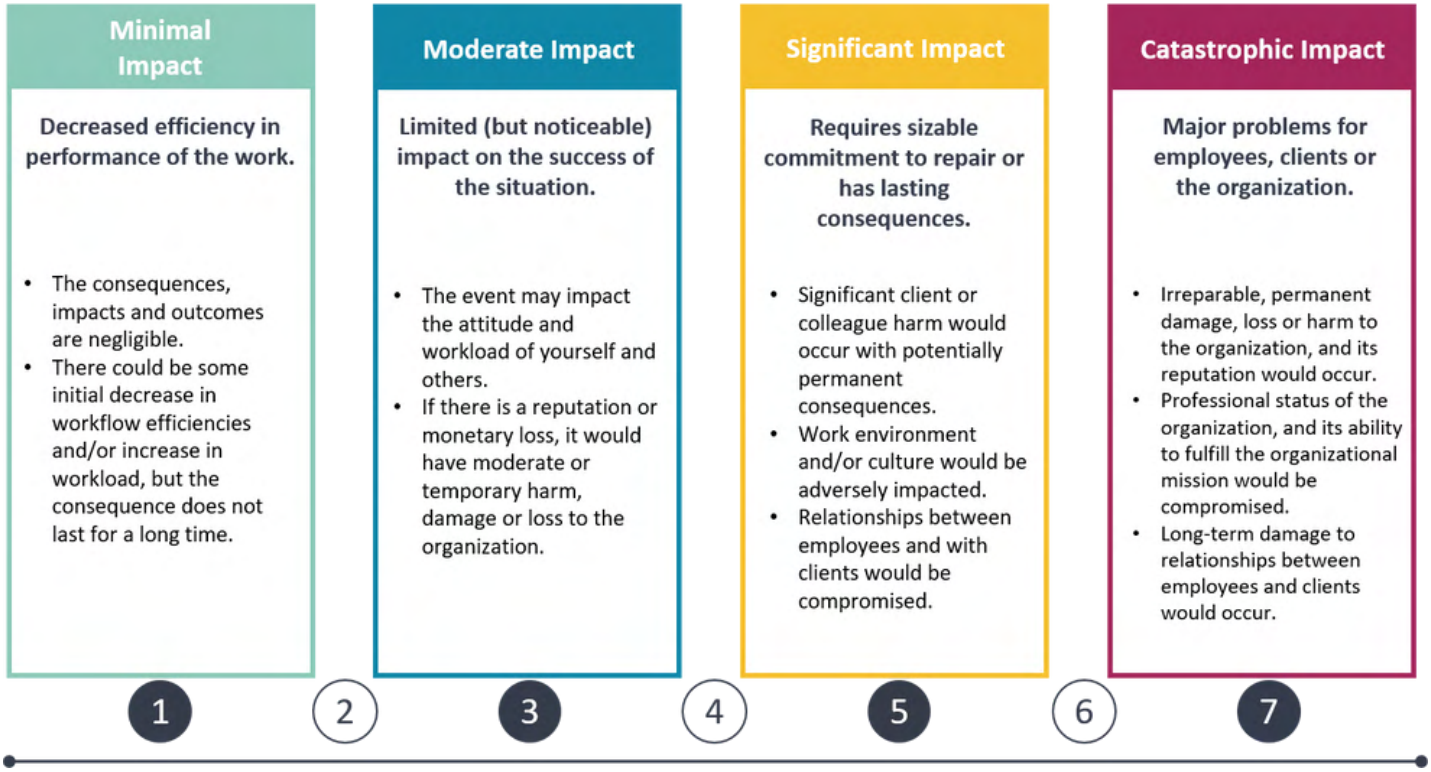
Jason's mother started as his driving coach. But, recognizing that her feedback was primarily prompted by panic, she quickly reassigned the job to me. I vividly remember riding in tongue-biting silence as Jason transitioned from what he had learned in the classroom to actually becoming a competent driver. The classroom with its "on-the-road" driving activities was a good start in his learning process. But that's all it was. His "real learning" to drive happened over time while in the flow of traffic (i.e., the flow of work).

This doesn't mean he didn't need the class. He did. Competent performance on the job can certainly start with formal training. But deeply rooted, connected learning requires ongoing application in the flow of work. It's here where all the real-world nuances hone, reinforce, expand upon, adjust, internalize, and integrate (I could go on) what was and wasn't learned during training.

Also, people are most receptive to learning while in the workflow. They have clear context and compelling need. What they don't generally have is someone to safely coach them through job tasks (something that is especially vital when the critical impact of failure is significant to catastrophic). This is why organizations need EPSSs. In addition to supporting performers in the workflow, these systems can help restore the time required to recharge the classroom with the right mix of methodology and delivery options. Most organizations have pushed so much content into their classes that there isn't time for trainers to engage learners in various methodologies of learning (e.g., practice, feedback, review, etc.). When we move content out of the formal training curriculum and into the flow of work via an EPSS, there is time to refresh the classroom with the right mix of methodology and principles of instruction.

An EPSS provides 2-click/10-second "task-level" access to all the resources an employee needs to perform effectively on the job. We use a rating scale like the following to identify the tasks that

people can safely learn while in the flow of their work (using an EPSS). At whatever moment in time they need to perform any task rated a 4 or lower, they can simply use the EPSS to "coach" them as they perform the task. If they make a mistake, that's ok. They'll learn from it while in the context of their workflow and will more readily remember it because it happened in the context of their work. Failure, when the consequences are low, can be a most effective teacher.



Workflow learning also fosters self-initiated continuous improvement. If we can navigate the workflow learning path wisely, we can actually enable continuous performance improvement that is measurable and accelerated. This requires putting in place a 5 Moments of Need infrastructure that allows employees to initiate their own learning while they are in the workflow in addition to pausing or stepping away from their work to begin to learn in a formal setting.

As you move forward in your efforts to embrace the workflow learning side, you can safely navigate that uncharted path if you keep sight of these three realities:

- Real skill development occurs while performing work.
- Continuous improvement begins and ends in the workflow.
- Competencies and values must be reinforced in the context of work.

They are beacons to help you avoid pitfalls and sort through the many voices and views in this vital journey.

Higher order thinking is related to this concept of self-initiated continuous improvement.

Conrad explains this here in greater detail and provides a real-life example for clarification:

Competent performance requires the automation of “low-level details". For example, it is unsafe to consciously occupy our minds with the rudimentary skills of driving. (Anyone who has been in a car with their son or daughter after receiving a driver’s permit understands this reality.)

I was recently driving to join my wife and oldest daughter for her birthday celebration at a restaurant in another town. I was consciously aware of the road and traffic but because of my many years of experience, my rudimentary driving skills are automated. This made it possible for me to drive safely, be fully aware of the limited traffic around me, and still engage my mind in higher order thinking. At the time, I was considering ways my wife and I could help our daughter through some difficult challenges in her life.

While driving and engaging in this higher order thinking, I automatically drove in the direction I most often drive on that road and passed the turn that would take me to the other side of the town where the restaurant was. I decided I would turn onto a new road I had never taken through an area that a few years ago had been farmland but now is a series of developments.

As I drove through this unfamiliar area, navigating my way out of several dead-end streets, I was forced to stop my higher order thinking processes. My mind was compelled to figure out how to get to my destination. I then had a brilliant idea. I stopped the car and entered the address of the restaurant into my GPS. Immediately, I had the guidance I needed, and I was able turn my mind away from navigation to focus on another line of higher order thinking. Until then, I hadn’t considered how performance support frees up cognitive load, making it possible to think about more critical thought patterns – like traffic, safety, problem solving (our daughter’s needs), and innovation (the role of performance support in making it possible for people to engage in higher order thinking).

There is compelling evidence that performers spend a high percentage of their work time searching for information to perform their jobs. Some estimates are as high as 25 percent of a typical workday! [Source: https://www.valamis.com/blog/why-do-we-spend-all-that-time-searching-for-information-at-work] This is clearly wasted time, as people stop working to find what they need to do their work. Certainly, this challenge alone justifies the need for performance support. But my experience suggests another dimension of waste in the workflow: unnecessary time spent in tactical thinking, such as remembering and transacting the steps of a specific task, navigating through software, or completing a form.

In the same way that I was forced to devote my thinking processes to finding my way through a maze of unknown streets, tactical thinking on the job ties up working memory and limits a performer's ability to transition to higher order thinking. This is wasted thinking time and it can impact the success of an organization.

An EPSS provides performers 2-click/10-second access to tactical guidance they need to successfully perform their job tasks, at their moment of need, in the way they need. When we provide

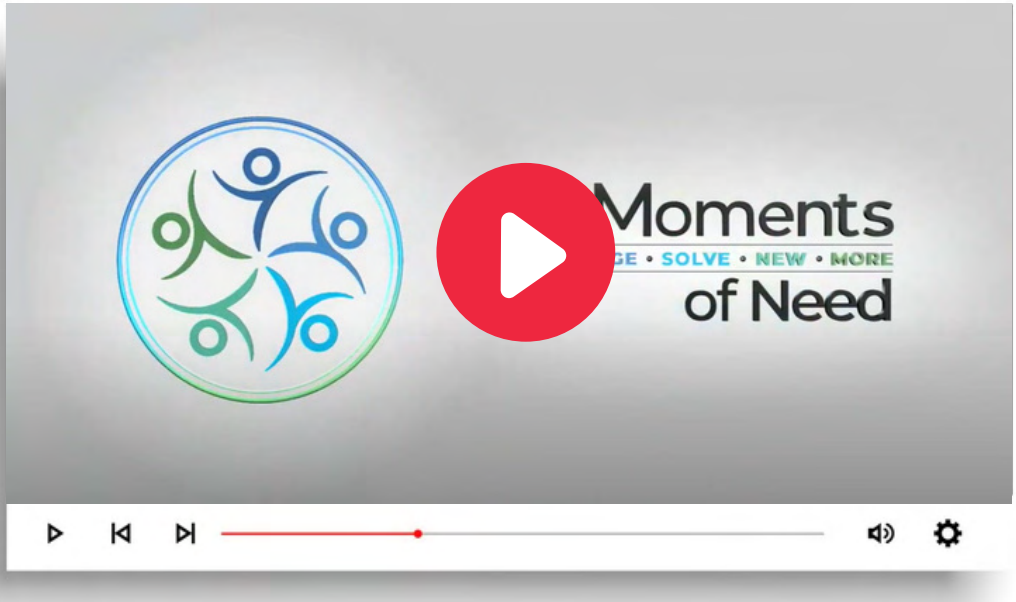
performers this level of "GPS" support, we free up the ability for them to focus their minds and efforts on fulfilling the actual vision, values, and mission of the organization. They are free to formulate constructive ideas and adapt or develop practices that can lead to greater profitability, innovation, and contribution. Unleashing higher order thinking to bring about these benefits obviously takes more than performance support. But whenever the minds of employees are bogged down in the thinking required to perform the tactical work they are doing, they obviously can't enter this higher realm of thought.

Suffice it to say, in a variety of ways, workflow learning enables performance improvement that benefits both the individual performer and the organization at large.

VALUE PROPOSITION OF THE 5 MOMENTS OF NEED FOR LEARNING & DEVELOPMENT

Now that we've focused on enterprise-wide benefits of the 5 Moments of Need, let's consider how this framework specifically benefits L&D, and how it enables learning professionals to accomplish goals they've been chasing for decades.

Whether you're a learning professional on purpose or by "accident", you have the same principal goal: to help your organization succeed by enabling employees to perform their jobs well. At the same time, you want your learning function to be recognized and treated as a true strategic partner to the business, one that can demonstrate impact and help shape its future. 5 Moments of Need solutions enable all of that – and more! Click the play button below to access a short video in which we sum up the excitement and power of workflow learning done well.



So, how do the 5 Moments of Need empower a learning function to help its organization succeed? There are several ways that we'll explore throughout the rest of this chapter, explaining how the 5 Moments of Need framework improves and transforms organizational learning efforts so that they directly and measurably benefit learners, L&D, and the business.

LEARNING AGILITY

5 Moments of Need solutions enable L&D to cultivate learning agility: an organization's ability to survive and even thrive in environments of unrelenting change. Here, Conrad challenges the learning field to take an active role in this arena:

What are you doing to help your organization cultivate a state of learning agility? This charter naturally belongs to the learning field, but we need to pick it up and run with it. Here are some suggestions to help you do this.

1. Align all learning inputs with organizational outputs.
2. Assume the mantle of a leader who is always learning.
3. Help your organization move forward with initiatives that cultivate organizational learning agility:

    - Unify learning and other support functions to cultivate learning agility.
    - Integrate learning and performance support practices to address formal and informal learning at all moments of learning need.
    - Cultivate evaluation as an individual and organizational competency. Highly agile organizations differ from those that are not, based on their capacity for evaluation.
    - Cultivate an organizational culture and leadership behavior that supports learning agility.
    - Continuously grow and manage unrestrained content capital. Content becomes capital when it's captured and made useful to the organization.
    - Drive collaboration within and beyond the organization.
    - Push ownership of learning to the front line and to the learners themselves.

Learning agility is becoming the defining quality of high-performance organizations. It is fast becoming a core leadership competency, and it currently provides the learning industry a singular opportunity to contribute in unprecedented ways at elevated levels.

Learning agility is unattainable without workflow learning. The heart of sustainable agility is the work of supporting performers in their moments of need.

To successfully walk into that room and begin the process of agility transformation, we must be absolutely prepared. Here are some suggestions to help you negotiate the whitewater rapids that lie ahead:

1. Make sure you have internalized the value proposition of organizational learning agility. You must take the time to authentically own this journey.

2. Cultivate a broader organizational leadership view. For example, you need to understand market movements and trends so you can spot the earliest signs and movements of market challenge. You need to rival the strategic planning function in its ability to collect external information and signals from the outside environment. You need to be business savvy and able to go toe-to-toe with any other leader in business acumen.

3. Be ready to lead your organization into a realistic 5 Moments of Need and workflow learning strategy that will, over time, deliver learning agility.

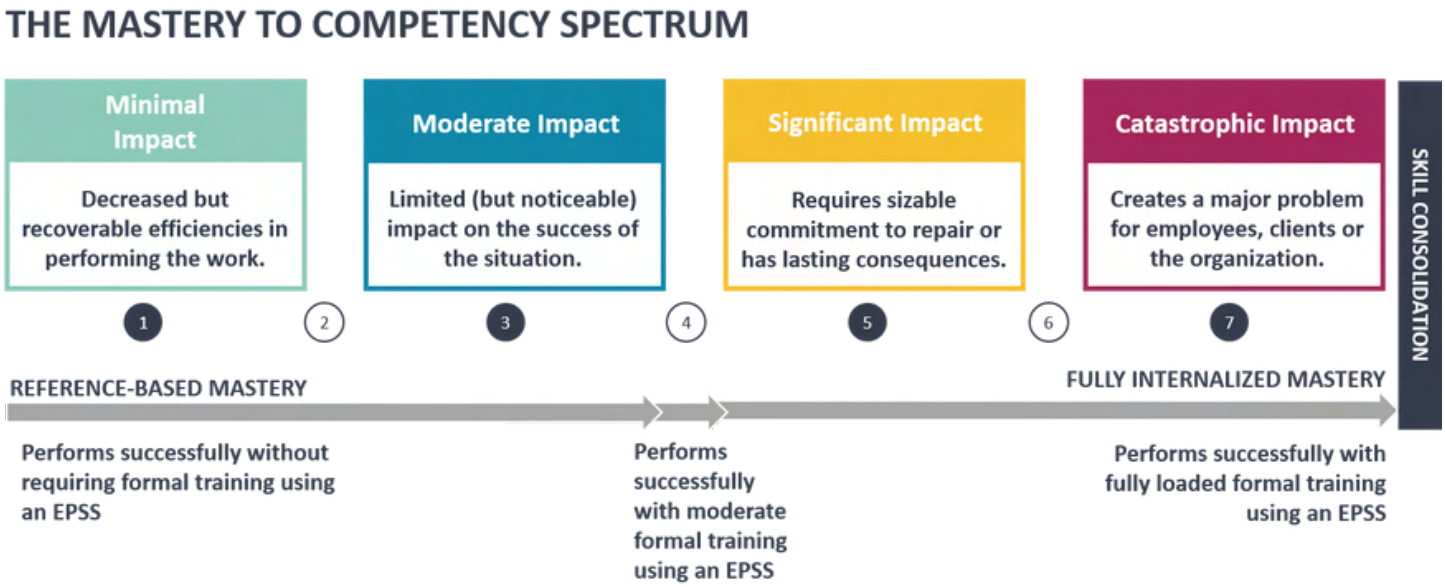
4. Don't go this alone. We need to network as a community to help each other succeed in this journey. We need to be benchmarking our successes and sharing them with each other. The stakes are high on this one. There has never been a greater opportunity for our industry to finally deliver the value it has always been capable of providing.

5. Don't attempt to boil the ocean. As I mentioned, there is more to this than performance support, but performance support is at the heart of it all. Start there and deliver value. Know what you need to accomplish over time and run at it with resolve.

At some point, your organization's survival will depend on its readiness to respond adeptly with speed. Most likely, you have enormous amounts of low-hanging fruit to pick in your efforts to increase learning agility. Go for that, and don't give up!

Skill Development

Real skill development occurs while continuously performing work (in the workflow): not in formal training events. But as Conrad explains here, when an effective EPSS is in place, the nature of formal training can transform into a rich learning experience that accommodates the full range of mastery requirements.



Mastery includes complete internalization of an independent skill. With this highest level of mastery, a performer can complete a task automatically. This capacity is securely encoded into long-term memory and can be executed without conscious thought. It just happens when it needs to happen. Generally, only skills where the critical impact of failure is significant to catastrophic merit this level of investment (see graphic above).

On the other end of the mastery spectrum is the ability to efficiently complete a task using the EPSS without any direct training on a specific skill. Learning can occur in the workflow. This reference-based learning is made possible by a generalizable understanding of how to use the EPSS. Too often, organizations treat skills at this end of the scale in the same way they do those where the impact of failure is catastrophic. This approach is costly and unreasonably extends time to competency.

Competency embraces this full spectrum of mastery. But competence is only fully achieved when performers have integrated what they have mastered into actionable skill sets within the context of their personal workflow. This generally requires integration with other existing skill sets and with other people via collaboration.

These integrated skill sets must be internalized at the appropriate level so they can be successfully executed as needed with a justifiable amount of effort. What is more, competency always carries

sufficient conceptual understanding to facilitate proper judgment and the capacity to adapt, on the fly, to the unique challenges that occur in the workflow.

Here's the point. With an EPSS, event-based learning can focus on those skills where the critical impact of failure merits the investment of rich instructional methodology. But the rest of learning can be reference-based. That is, learners can turn to the EPSS in the flow of their work and safely perform their jobs. They learn while they are performing, guided and helped by an EPSS.

WHY THE BEST LEARNING HAPPENS IN THE WORKFLOW

Workflow Learning vs. Singular Events

The best learning happens over time and in the flow of work vs. in singular events. Another term for this is "spaced learning". Research verifies that distributed practice, which is a core component of spaced learning, is particularly beneficial if long-term retention is the goal. More than 800 experiments have demonstrated that spaced repetition increases long-term retention in individuals by 200% and that the optimal time to review information is just before the "forgetting" phase.

Forgetting is a byproduct of time, and it is in the workflow where the most critical forgetting happens. Therefore, it's the workflow where the "optimal time to review" is best addressed. This is what an EPSS can do most effectively. Performers naturally turn to an EPSS when they need to perform and are right at the point of uncertainty (the forgetting phase).

"The best learning happens over time and in the flow of work vs. in singular events."

Motivation to Learn & Change Performance are Greatest in the Workflow

Here is a reality: the closer a performer is to the place and moment they need to perform, the more open and ready that performer is to learn. Consider your own learning mindset while in the workflow compared to when you step away from it to learn in the fabricated environment of a classroom or an elearning course. In which of those moments and environments are you most motivated and ready to engage mentally, emotionally, and physically to learn?

Learning in the Workflow is Personalized

For some, personalized learning is the holy grail and ultimate achievement for L&D, but it has proven extremely challenging to realize. Enter workflow learning, which personalizes learning in these ways:

- Via content management by job role.
- By living in the flow of an individual's work.
- By supplying real-time "gap learning": learning right when it needs to happen (when an employee needs to do something right now!).
- And, most importantly, providing a support structure in the workflow, via an EPSS, that allows the performer to personalize their learning based on their current need and circumstance.

Adaptive Learning can play a significant role when it comes to gap learning. Adaptive Learning is a dynamic, question-based learning approach, powered by technology that pushes personalized questions to performers based on specific work requirements. This dynamic questioning system can be triggered by location, has proficiency calculators that recognize weak spots, and adjusts questions based on each person's level of mastery. Repetition of questions is based on research-based algorithms and tailored to each participant as they adapt to their specific knowledge gaps. With each question there is feedback and knowledge reinforcement.

An Adaptive Learning system can be especially effective in keeping knowledge current in constantly changing work environments. Its reporting capabilities can also verify mandated learning requirements.

WORKFLOW LEARNING SAVES THE CLASSROOM!

Yes, you read that statement right! Workflow learning "saves" the classroom. How? By freeing it from being treated as a dumping ground of too much content that's "taught" in too little time, limiting its ability to provide real-time troubleshooting/feedback, empathy, experiential expertise, a safe space to practice and fail, and much, much more! Conrad explains this concept in greater detail here:

Too Much to Train and Not Enough Time

In our world of rapid change, we no longer have the luxury of enough time to learn. While the scope of what people need to learn to keep current in their jobs has increased, the time allocated to learn it has decreased. This presents a particular challenge, especially with live classroom instruction. There is too much content and not enough classroom time: a situation which often pushes trainers to skip content or rush the learner in an attempt to cover it all.

See if this real-world example sounds familiar. An L&D group recently celebrated the reduction of a 5-day course to 3 days with what appeared to be no loss in learning outcomes. But here's what really happened. Analysis of the course revealed that its instructional integrity didn't change, hence no loss in learning since there were few if any outcomes planned in the first place.

In both the 5-day and 3-day versions, learners were exposed to 1.8 slides per minute. These slides were content intensive, requiring instructors to devote 80% of the instructional time to just presenting the content. Here's what the allocation of instructional time looked like:

- Presenting content: 80%
- Interacting with the content to facilitate learning: 10%
- Showing how to perform the actual skills: 5%
- Practicing the skills with direct feedback: 5%
- Reviewing/reinforcing what was learned: 0%

This is anything but an effective allocation of instructional time. In the contribution hierarchy of skill development, presenting is at the bottom of the list; yet, as can be seen in this example, presenting is displacing the other vital contributors.

Here's how technology can help bring greater instructional balance to the allocation of learning time. Gloria Gery, in 1991, introduced a new learning modality designed for the workflow called an Electronic Performance Support System (EPSS). She defined it as a technology-enabled tool that "provides on-demand access to integrated information, guidance, advice, assistance, training, and tools to enable high-level job performance with a minimum of support from other people".

We are now seeing an emergence of EPSS technologies and associated methodologies that are proving astonishingly effective in lifting the content presentation burden from trainers. This frees up instructional time for more effective learning experiences within the classroom. In this "flipped" classroom, instructors bring the EPSS into the classroom and use it as the primary means for learners to access the information they need in support of practice activities with highly interactive discussions around those activities.

In the flipped approach, participants learn primarily by doing and discussing rather than by mostly listening. The table below shows the times and percentages of the 2-day EPSS course compared with the previous 5- and 3-day versions of the course.

	5-Day Course	3-Day Course	2-Day EPSS-Supported Course
	1000+ Slides	600 Slides	75 Slides
	33 slides per hour (1.8 per minute)		9.6 minutes per slide
Present Content	80%	80%	10%
Discuss	10%	10%	20%
Show	05%	05%	15%
Practice with Feedback	05%	05%	45%
Review	0%	0%	10%

Notice how much more time is spent reviewing and discussing the content on each slide.

Here is more good news. Although some skills merit the investment of formal learning, others don't. These skills can be safely learned in the workflow with 2-click/10-second access to the required information in the EPSS.

Because the EPSS can travel with learners directly into the workflow, not all content requires attention during the formal learning experience. Prioritizing classroom content to just the essentials allows significant reduction of time away from work to learn. Hence, in the example shown above, the 3-day course was reduced to 2 days by completely flipping the learning methodology within the classroom.

Too Disconnected from the Actual Workflow

Transforming the classroom into a learning experience dominated by practice does not guarantee effective learning. Practice delivers value to the degree it realistically addresses what people need to know and do in their workflow. Herein lies a second great threat to training effectiveness. Practice in the classroom too often lacks workflow fidelity, where what we train people to do is what they they actually do in their work. This is due, in part, to a flaw in traditional instructional design methodology.

In an effort to write learning objectives that can be measured during training, those objectives, for the most part, fail to describe what performers really need to do in their work. Take a look at the following list of verbs often used in writing learning objectives:

At the completion of this lesson, the learner will be able to:

cite	recognize	measure	analyze	appraise
count	associate	order	appraise	assess
define	classify	choose	judge	choose
describe	compare	complete	distinguish	compare
recite	explain	question	quote	critique
identify	contrast	rank	match	decide
indicate	express	deduce	detect	determine
list	describe	examine	discuss	estimate
name	differentiate	illustrate	infer	evaluate

These verbs are far removed from describing what learners actually need to do in the workflow.

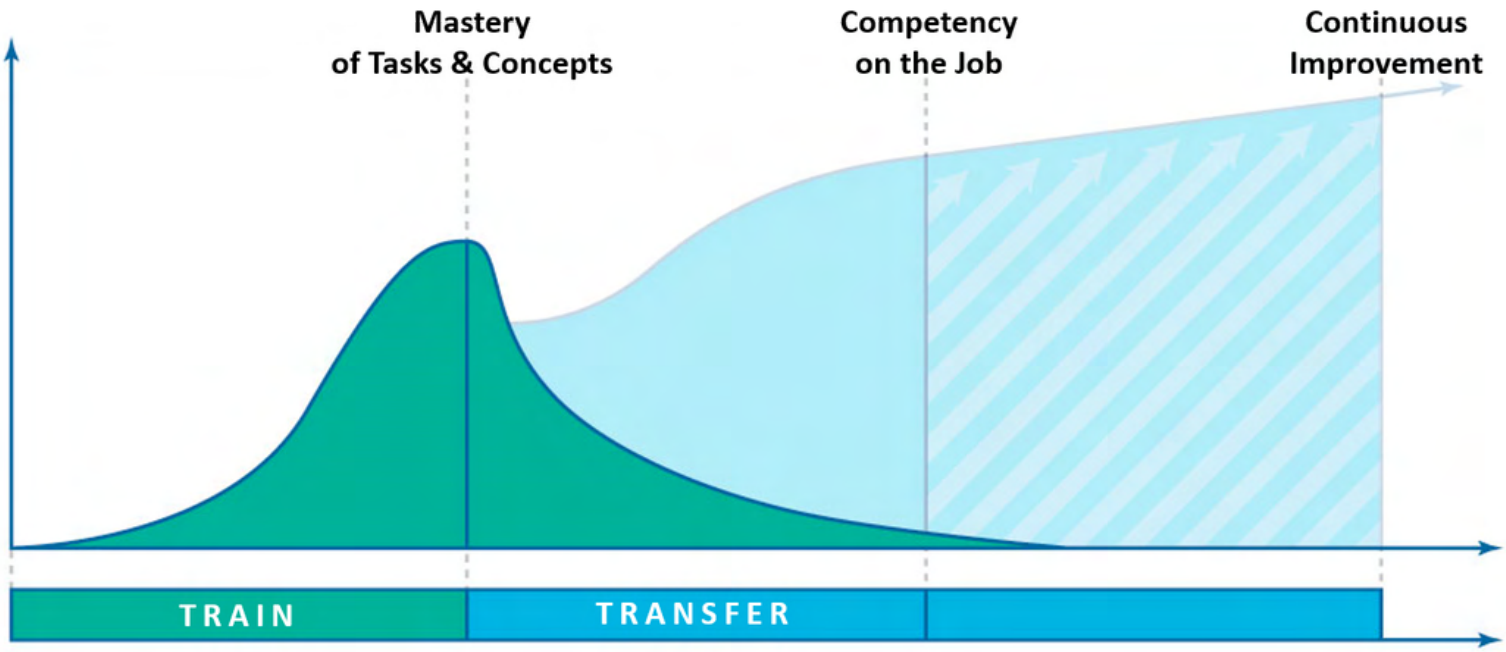
Consider the thousand-slide course referenced earlier. In the effort to reduce the course to 3 days, Subject Matter Experts (SMEs) offered up 221 learning objectives. Only 40 of the 221 (18%) learning objectives targeted actual job tasks. Those 40 objectives directly related to only 14 (24%) of the 59 actual tasks that learners needed to be able to perform in the workplace. The learning objectives approach also failed to identify 15 other tasks that would result in critical to catastrophic impact if ignored.

The SMEs also identified 181 objective statements that only addressed 27 (15%) of the 69 actual concepts that learners needed to understand to make correct decisions. These 181 objective statements focused on differentiating, identifying, distinguishing, listing, describing, summarizing, understanding, and explaining. These are cognitive objectives vs. behavioral objectives. They may be measurable, but they are most certainly disconnected from much of what learners need to know to perform effectively in the workflow.

There's much more to this disconnection than Bloom's Taxonomy, however. The distance from the classroom (virtual or not) to effective on-the-job performance is vast. In formal training, we pull people away from their work and to the best of our ability create an environment that mimics the real world. Then we attempt to train them. But at the moment the training/learning experience ends, whatever they have learned enters the "forgetting death spiral".

Too Much Forgetting, Too Fast

Learners vary in how much they learn while participating in any formal training course. Whatever they learn, though, rapidly evaporates following the learning event. The rate of evaporation depends upon whether the instruction was superficial or methodologically sound and upon the complexity of the knowledge and skills. In short, forgetting happens and most of the time it happens quickly. The following graphic shows how, at the end of training, memory immediately begins to deteriorate, and within a few hours, much of what was "learned" is gone.



Our learning solutions need to counter this reality and intentionally assist learners as they transition from learning to performance on the job. Leaving the situation to chance is both risky and costly.

A task-based EPSS can interrupt the forgetting curve and bridge the gap between the training event and the workflow, shortening the time from the start of a course to successful on-the-job performance.

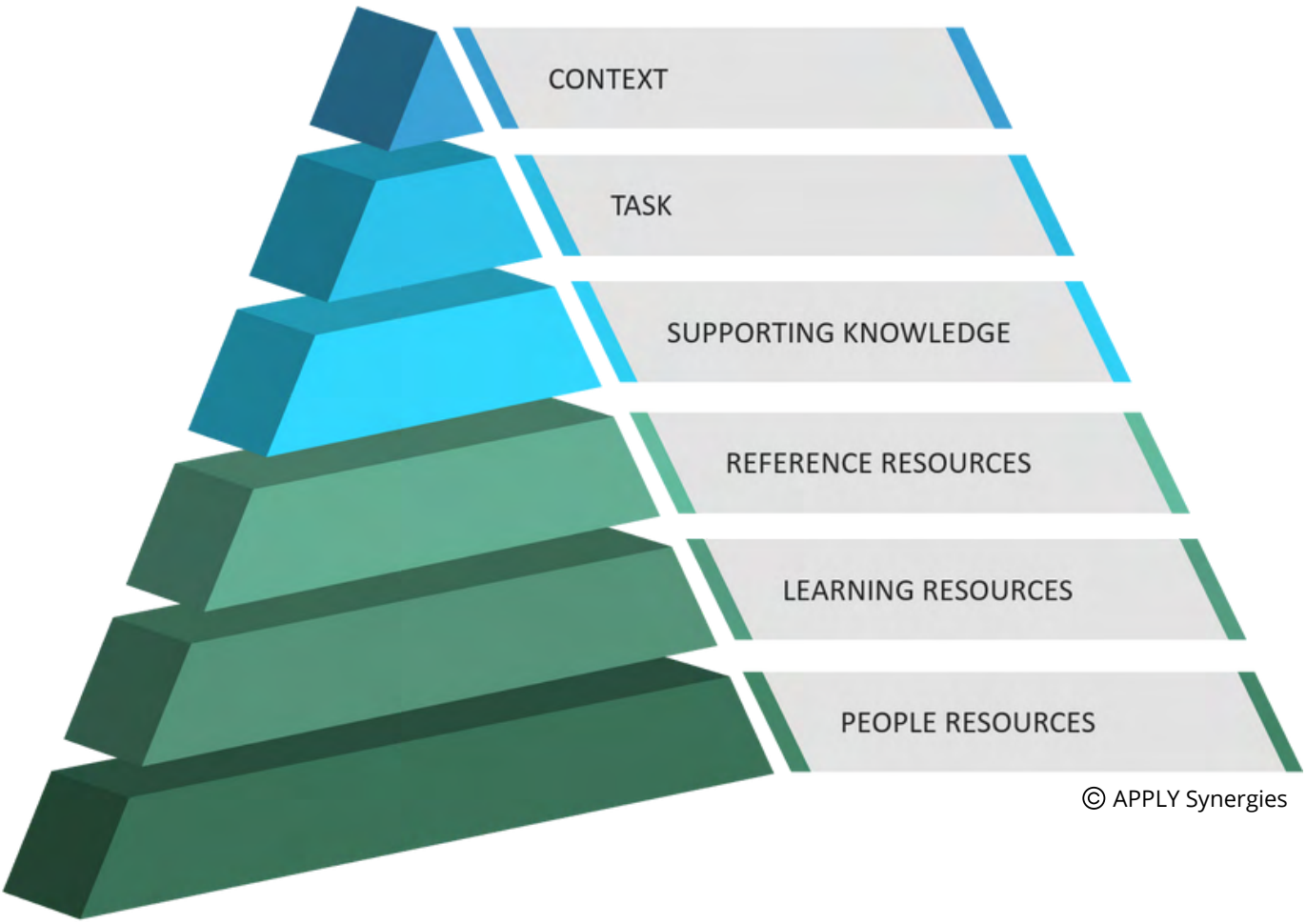
While formal training is an important part of any learning and performance support strategy, without on-the-job performance support, it will take performers longer to transfer what they have learned to their jobs and they may not remember all the pieces of specific tasks they need to perform.

At each stage, performers need different types and levels of support. Understanding the different stages of the complete learning journey is critical to designing a learning and performance support strategy that not only meets the needs of all performers but also addresses strategic needs of the organization. Intentionally addressing all three stages of Train, Transfer, and Sustain frees

performers from the burden of remembering and remaining current. It reduces time they take to step away from their work to learn, solve problems, and assist others. In its place, performers can focus their efforts on the actual work of the organization: continuous improvement and collaborative innovation.

The following table shows what a complete learning and performance solution needs to include:

Train	Transfer	Sustain
This stage needs an orchestrated learning experience that specifically targets job-critical knowledge and skills.	This stage needs a "familiar" performance support solution that provides immediate (e.g., 2-click, 10 second) access to the tasks and related concepts identified in the Job Task Analysis.	This stage needs immediate access to integrated performance support solutions that provide immediate access to cascading levels of support (see the PS Pyramid below). These integrated solutions need to provide targeted access to updated knowledge and skill requirements at the moment of Apply.
Core components include: • A real-time, virtual, in-person, and/or self-instructional course. • The appropriate learning support components (e.g., participant guide, slides, activities). • The performance support solution that learners will rely upon as they enter the other two stages.	Core components include: • The performance support solution that learners learned to use in the "Train" stage.	Core components include: • Job-tailored, integrated performance support solutions with full-pyramid support.



Unrelenting Change

Skills, when performed over and over, tend to become automated, meaning they are deeply rooted in people's skills sets and performed without conscious thought. Once skills have become ingrained into the work practices of people and organizations in this way, replacing out-of-date practices with new ways of performing and thinking becomes one of the most significant learning challenges an organization can face.

Currently, most organizations are doing all they can to overcome unrelenting change. But what's missing is technology-enabled performance support. Only with an EPSS can we hope to keep constantly changing information current and accessible to our performers.

In *The Sun Also Rises*, Ernest Hemingway's character is asked how he went bankrupt. He replies, "First gradually, and then suddenly."

This will be the case for much of what we call formal learning today unless we push our efforts more deeply into the organizational workflow and provide people with the technological tools and preparation they need to perform successfully. This strategy must be at the heart of all we do and

should always have been the case. The people we are charged to train and support deserve "immediate, intuitive, tailored aid" that is intentionally orchestrated by technology to "ensure the most effective personal and collective performance".

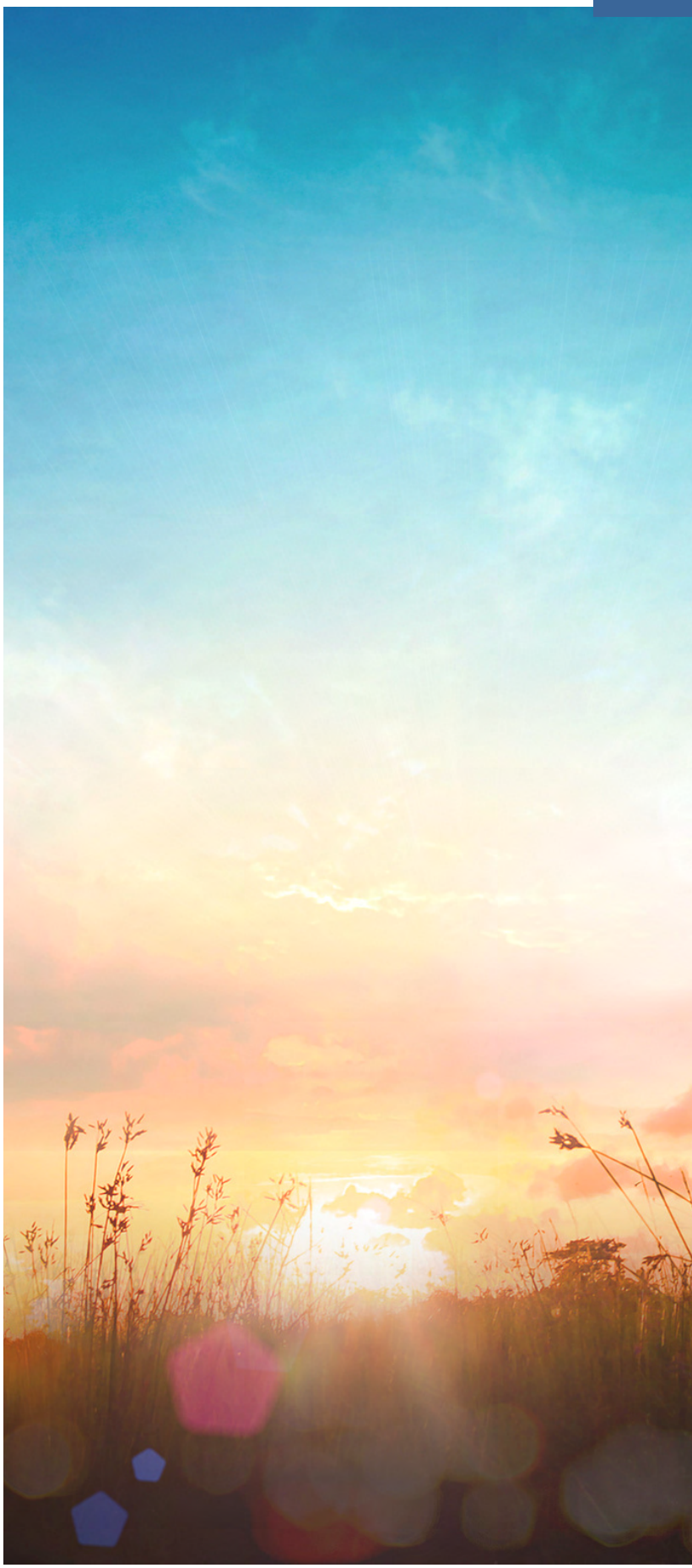
Continuing our thinking about the classroom, introducing workflow learning and performance support there empowers learners to support and improve themselves. Here, Bob asks a key question and explores this topic in greater detail:

Do our learners live in a world of self-empowerment or one of dependency?

This is the new world of the classroom. Its new role is to inform and teach how to survive in the ecosystem. It's the beginning of the journey. Employee engagement is a huge issue. The numbers are not promising when we look at our employees' willingness or understanding around their own engagement. In our efforts to be supportive, we have often created a world of confusion and dependency. This would not be good parenting! We don't need 40-year-olds who are still living at home! Rather we need self-reliant and self-confident learners supporting themselves, and each other, intelligently and effectively in their ecosystem.

It's a brave new world! And one that is moving out from under many of us. The train is on the track. We can either get on or be run over. The learning resources and technologies at our disposal allow us to enable, and frankly be a part of, the ecosystem in ways we've never experienced. It's up to us to embrace these approaches and rethink our roles and responsibilities as active members of the ecosystem.

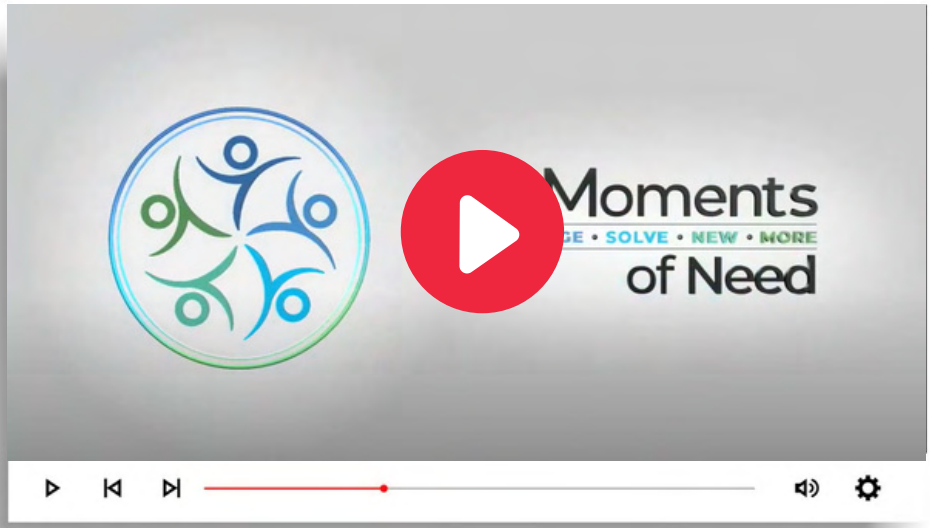
In the classroom, we need to clarify and TEACH the support options available. This is an area that most organizations struggle with. It's not the availability of options, but rather the mapping



and blending of these learning and support assets. We need to do a better job of helping our learners understand their performance needs and the most effective ways to support themselves along the journey. To most learners this will be a dramatic change in how they approach learning. One reason for this is that we, as learners, have not been taught the skills to support ourselves outside of traditional learning and support options. We have been trained to basically pick one modality and stick with it, like it or not. With today's performance support options, learners need to understand what's out there, how these options best match up to their current learning situation, and that they ARE allowed to use other support options to achieve their performance outcomes. Most companies are trying to offer some form of blended learning. Most of these tools range from independent modalities like elearning to highly dependent modalities like the classroom. Performance support can be the tie that binds. Its ability to broker content and learning assets based on job roles and workflows makes performance support the perfect wrapper and enabler of learning and performance back on the job.

TRAIN. TRANSFER. SUSTAIN.

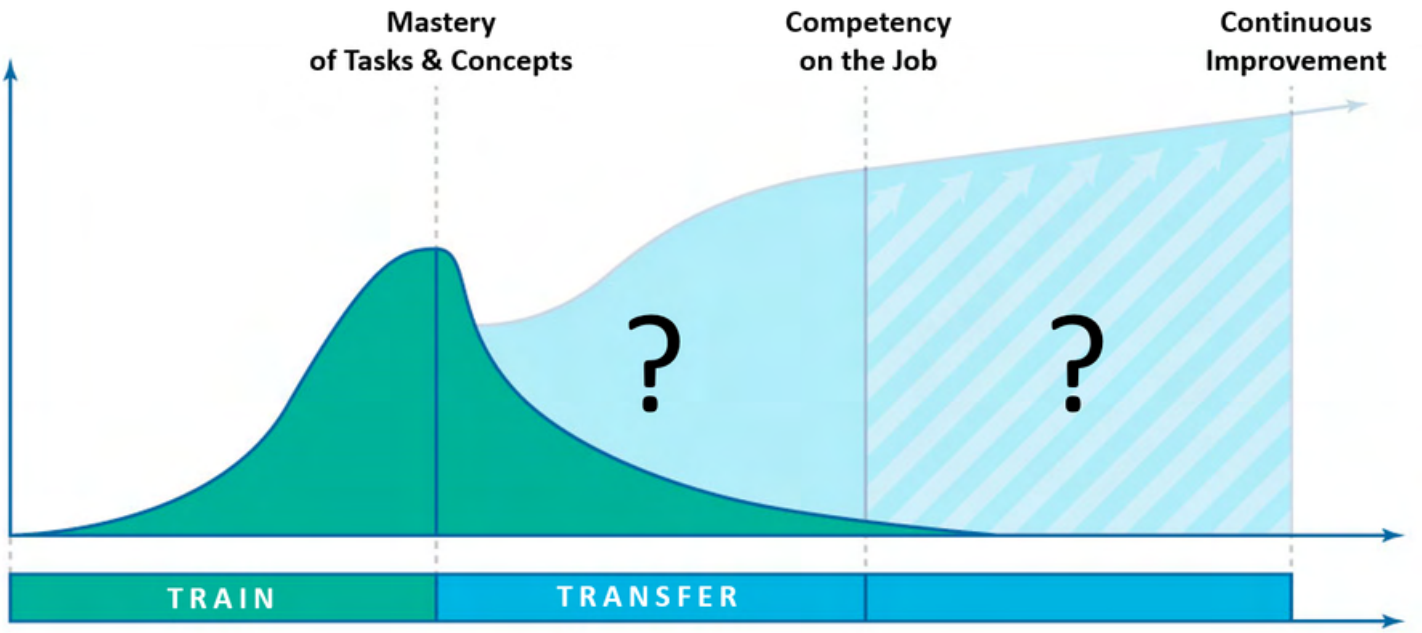
Let's dig a little more deeply into the train/transfer/sustain model, which is key to understanding how workflow learning truly impacts classroom instruction. Click the play button below to access an 11-minute video that provides a great introduction:



Workflow learning builds on training events, ensuring that performers transfer what they learn in the classroom to their jobs, plus sustain learning and performance during times of change. Here, Bob and Conrad provide greater detail on this:

You've trained them. Now what? They go back to their desks, immediately apply what they learned, and voila – increased performance? Not quite.

There's more to it than just the training event. In fact, there are two additional phases in the learning ecosystem that must be addressed to achieve learning success: transfer and sustain.



Think of your learners as performers. Now, set them on their journey with the overall objective of becoming and remaining competent.

To become competent in our ever-evolving business landscape, performers must clearly master things. You must train people up to a point of mastery. You definitely do not want a pilot flying a plane without first mastering the concept of lift and the skill of landing.

One challenge of the journey to mastery is that learners achieve it at different rates. So, in any given event, in any given period of time, you have differing degrees of mastery

Then, within this range, we also have the Ebbinghaus' Forgetting Curve. As Jaap M. J. Murre and Joeri Dros explain in their article "Replication and Analysis of Ebbinghaus' Forgetting Curve", this is where performers, once back to work, begin to rapidly forget whatever it is they have mastered and learned in their event-based experience.

So, how does one ever get to competency? It's one thing to master something, but it's another to be competent at it. Take for example a story Bob tells on this topic: he received an A+ in accounting while in undergrad, but there was no way he was prepared to actually do your taxes. Mastery did not transfer to competency.

The journey does not end at mastery because the performer must get to some level of competence. This stage is a crucial one as it is where all the different "mastered" pieces are integrated together to form a whole. They are integrated through our experience as we apply those mastery items to our jobs, all while adjusting and adapting them.

Transfer is a challenge for performers, even if they refer to a training event where they practiced in class with real-life scenarios in a hands-on lab that simulated the workflow. Trying to remember and make sense of all that is very difficult. At the end of the day, it was still a practice situation vs.

the actual workflow. Learning may be initiated outside the flow of work, but until learners adapt what they were taught to their real-world environment and integrate all they have learned and experienced with their existing skill sets, they haven't truly learned.

To further complicate things, not every performer's workflow is the same as the next, and your workflow today is different than tomorrow's. Making that journey of taking whatever is mastered, integrating it with one's existing skillset, and becoming competent, more skilled, and better able to do what is needed on the job is no small feat!

What is current now may not be current an hour from now. So, it's not only how a performer transfers to competency, but how do they remain competent? Becoming a better performer over time is the "sustain" stage, and the driver of that stage is the element of change.

When we do things repeatedly, we master them. We become competent. Then, something changes. That challenge of overriding old skill sets with new skill sets is the greatest learning challenge that exists. You really can't train your way out of it. No organization can afford to do that. To unlearn and relearn is the real challenge.

The need for train/transfer/sustain has been around forever. People have always left events and been on their own with their newfound skills and knowledge. As learning professionals, we haven't given people the tools to truly navigate the transfer and sustain stages.

But with workflow learning, we do.

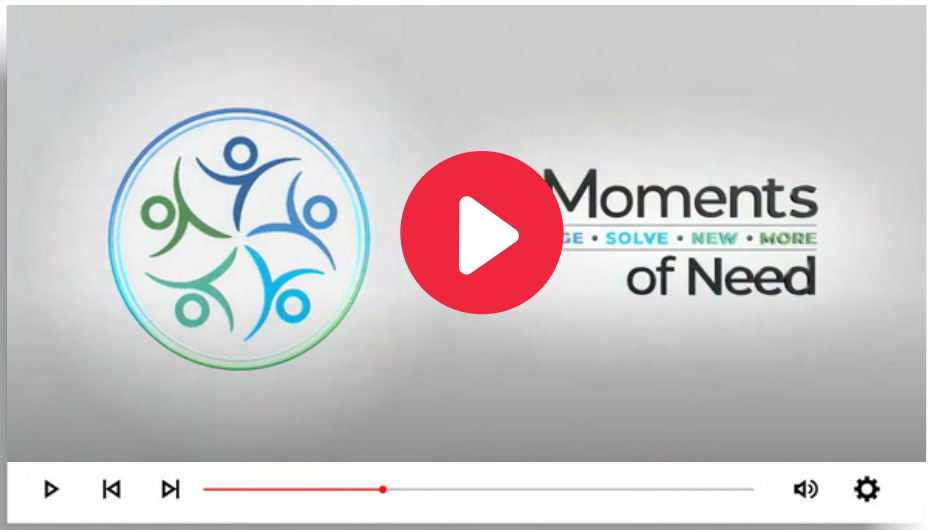
We do so by focusing on the application of what is learned and building solutions and tools to support people at their moments of need. Then, their Digital Coach, or EPSS, is with them at the critical stages of transfer and sustain.

We can intentionally make a difference that changes everything, bringing greater efficiency to every part of that journey through train/transfer/sustain.

The journey's destination is, again, competency and time to competency. With a workflow learning approach and train/transfer/sustain as the deliverable, we see time to competency considerably reduced because of what is enabled beyond the training stage.

RAMP UP, RAMP DOWN

Enabling the classroom to fulfill its purpose and true capability requires significant change to the instruction that happens within it. Click the play button below to watch Bob explain the "Ramp Up, Ramp Down" concept for classroom instruction that results in empowered learners who are able to sustain performance long after the classroom event is over!



SAFE FAILURE

As we stated earlier, one of the great strengths of the classroom is its ability to provide a safe environment for practice and failure. The 5 Moments of Need framework bolsters this ability through something we call Critical Impact of Failure (CIF). CIF helps sort out tasks where failure can be a safe learning experience. Think about times when you have failed, but where that failure didn't harm anyone or anything. It might have been uncomfortable, but you learned from it, right?

Learning through "safe" failure is most certainly a contributor to personal growth. Therefore, our methodology ought to include identifying and accommodating those tasks where people can safely learn when failure happens. Here's a scale to help you do that:

We'll dig into more details about this in later chapters, but essentially, it enables a TRULY blended approach to an overall learning and performance solution that allows the classroom to do all that it's called to do. It also reduces classroom time by 50% on average, freeing up many resources and time needed to create this new blend.

WORKFLOW LEARNING IN PANDEMIC TIMES: COVID-19 AS AN ACCELERATOR

During the COVID-19 global pandemic, more organizations have moved to a workflow learning approach to meet immediate, fast-changing needs. A "silver lining" of this unprecedented health crisis is that it has accelerated organizations' willingness to try new methods and technologies. Here are two examples from the field:

1. Bob recently interviewed Chris King of CEEK, Inc. about how his organization helped a client stand up a COVID-19 contact tracing call center in 8 days with zero training – just an EPSS – for 500 new hires (aka furloughed medical professionals who had to work off of a 20-page script to make 25-minutes calls). Click the play button to the right to listen to the entire interview.

2. Bob also recently interviewed Scott Schmoldt of UMR about how his very traditional learning organization adopted workflow learning in 2020 because they couldn't pivot to meet organizational needs quickly enough and had to go virtual FAST! While they are still in the early stages of adoption and overcoming challenges, the methodology is working, and they have several immediate goals. Click the play button to the right to listen to the entire interview.

"During the COVID-19 global pandemic, more organizations have moved to a workflow learning approach to meet immediate, fast-changing needs."

Finally, in another recent podcast, Bob explores the broader shifts and pivots that are occurring in L&D right now. We've summarized some key takeaways below. Listen to the full podcast by clicking the play button to the right.

- The pandemic has shown that many organizations see learning as essential and critical. It's top of mind! This is providing opportunity and acceleration, shifting the focus from courses to performance. It's an amazing time for systems like EPSS, LRS, and CMS, which help organizations pivot on needs. Right now, learners' needs are raw, making them highly focused and receptive to whatever helps them do their jobs!

- Learners are pivoting from survive to thrive. They are more independent and looking for (and creating) resources in new places. They analyze what they've used to get through the day. Many don't like virtual instruction (there is fatigue with VILT) and they are emotionally shot. We are even seeing lines of business asking for empathy content.

- Learning organizations are also pivoting, shifting to digital/virtual approaches. Ecosystems are growing fast and winning the day (with EPSS, LXPs, CMS, LCMS) because they're organizing learners' content. L&D is learning to measure outcomes vs. content and workflow learning is coming on strong because the workflow is disrupted. Trainers have shifted to VILT and have increased their mentoring/coaching roles in the business. Instructional designers are shifting to become performance consultants/architects, focused on performance needs, business impacts, and resource alignment. Data scientists have more data to work with than ever, and UX designers are blending user design across multiple deliverables and the workflow. AI, especially chatbots, is also being explored and leveraged.

- When it comes to virtual learning, there are more tools for engagement (e.g., chat, whiteboards, etc.) that are not to be used randomly as each requires different levels of courage, complexity, etc. Scripted, intentional engagement every 3-5 minutes is recommended, and printed workbooks are making a comeback. When it comes to video, many factors affect how it should be used, including exhaustion, intimacy, and intimidation. Spaced learning is "built in" because a virtual approach builds time for practice back into learning. And a key rule of any virtual learning approach is "don't teach everything: just what's most critical!"

In short, L&D is leveraging the 5 Moments of Need framework, workflow technology, and a variety of evolutions from the past 12 months to help organizations navigate and find success in these extraordinary times.

CONCLUSION

It's clear that the 5 Moments of Need framework provides significant benefits to organizations and their L&D functions. By building for support first (and less learning/training), we can lower support costs (e.g., helpdesk and post-training support), decrease the overhead of expensive learning resources while optimizing their use, empower learners to be confident in self-improvement and professional development, and create effective, impactful learning products that benefit the bottom line and organizational capacity. Everyone wins: the organization, L&D, and the learner.

CHAPTER TWO

WORKFLOW LEARNING: WHAT IT IS AND WHAT IT ISNT!

Workflow learning is a powerful practice with limitless potential, but it is often misunderstood. Let's clearly define workflow learning and debunk some common myths and misconceptions that surround it. We'll also address barriers that practitioners often face when implementing workflow learning, and how those can be overcome.

WHAT IS WORKFLOW LEARNING?

Workflow learning isn't just about making information available in the workflow. It's enabling an employee to learn and be supported while doing their work. True workflow learning is done in parallel: not on the side. It's done while getting work done. It instructs, informs, and supports the learner as they do their job. Many people assume all learning available in the workflow constitutes workflow learning, but its real power is enabling people to learn as they do their work, so they don't have to stop work in order to learn. That's the distinction.

It's important to note that whenever you develop a 5 Moments of Need solution, it intentionally enables learning in the flow of work, while performers are actually working (Apply, Solve, Change, More), and you optimize traditional training where performers stop their work to learn (Learn New and More). This, of course, requires a performance support infrastructure with EPSS (Digital Coach) capability.

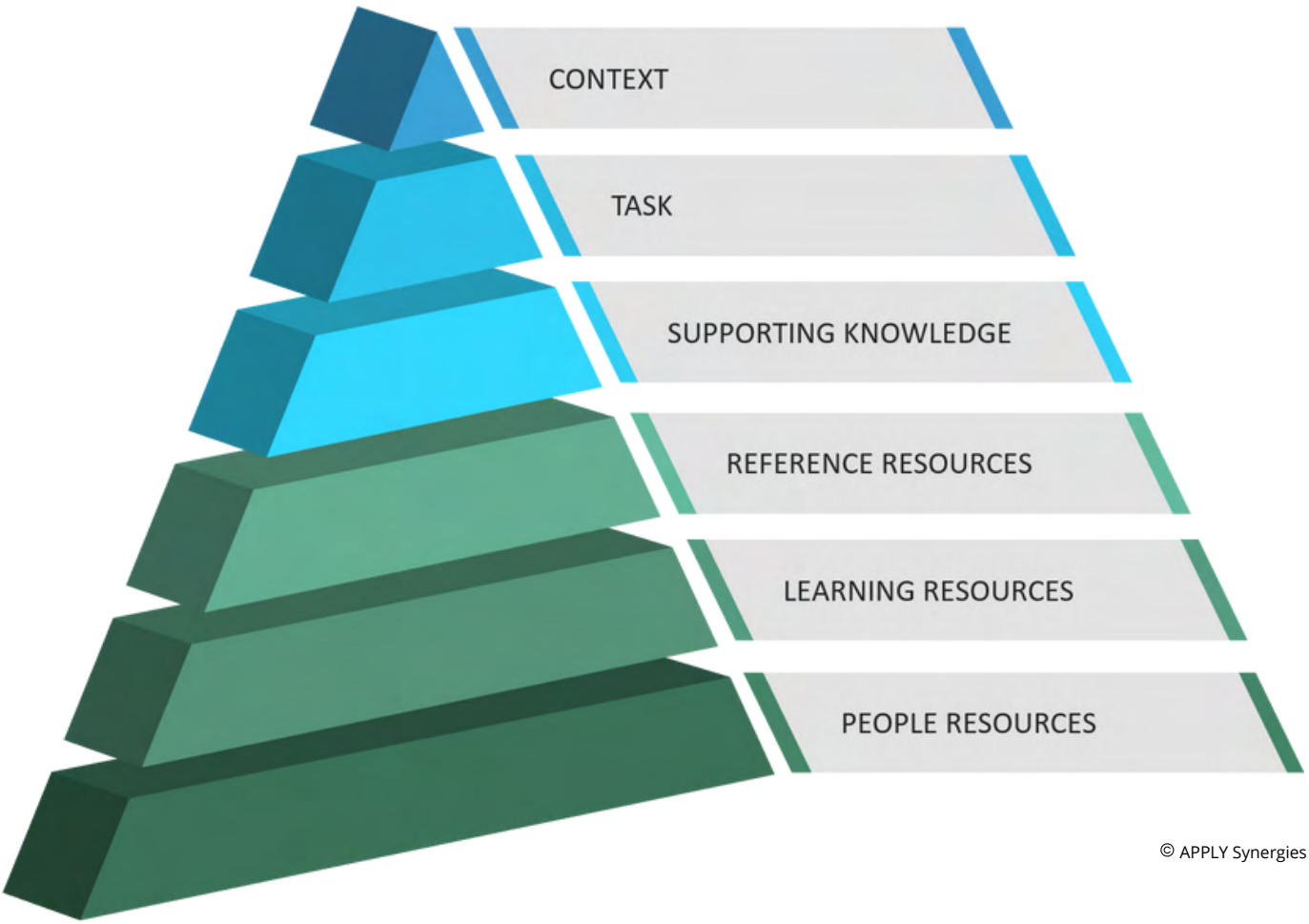
In his blog "Hopping on the Right Workflow Learning Bandwagon – 5 Guiding Principles", Conrad identifies and explores key elements that characterize true workflow learning:

Guiding Principle 1: Minimize time away from work.

An effective workflow learning strategy must minimize the extent to which people have to stop working to learn. Optimum learning occurs while people actually perform their work. This is a sweet spot for the discipline of performance support.

The Performance Support Pyramid (see the graphic below) provides a framework for supporting job performance via an EPSS (Electronic Performance Support Solution). An EPSS serves as a Digital Coach that performers can access anytime, anywhere, to help provide them 2-click, 10-second access to just what they need, at their moment of need.

The Performance Support Pyramid is a resource management hierarchy that addresses the evolving information requirements of employees as they perform each specific job task. The graphic below shows this layered approach describing how each layer can provide fingertip access to a specific category of information resources that employees need as they perform their work.



The top of the pyramid addresses the need to provide employees contextual access to the cascading levels of support resources that follow. The workflow process is the primary context for accessing all job-task level support. There can be other contextual ways to access resources as well.

Within 2 clicks and 10 seconds, performers can access a listing of the steps for a job task they don't know how to perform. With another click, they can access greater detail around those steps and follow them as they actually perform their work. As they do this, they are most certainly learning in the best classroom – their own workflow. The EPSS is their job coach. If the steps aren't sufficient, then another click provides access to the supporting knowledge they need to understand regarding

that job task. Or if they need access to reference resources like policy information, a decision support tool, etc. they can access them with a single click within the context of the job task at hand. If there is time and need, they can also access learning resources specific for that task.

In an EPSS, all these resources are intentionally orchestrated to facilitate successful job performance at the task level. Every time people use an EPSS to support themselves in the work they do, they are learning in the workflow. They are learning as they navigate through the rugged challenge of applying what they have learned formally to the realities of their workflow. They are also learning when they use the EPSS to follow the steps for a task they've never performed. They are learning when they use the EPSS to solve a problem that has cropped up. They are learning as they use the EPSS to adapt to change. They can even use the EPSS to briefly pause their work to access micro-learning "bursts" that target the same job task (thereby helping them learn something new or more about it).

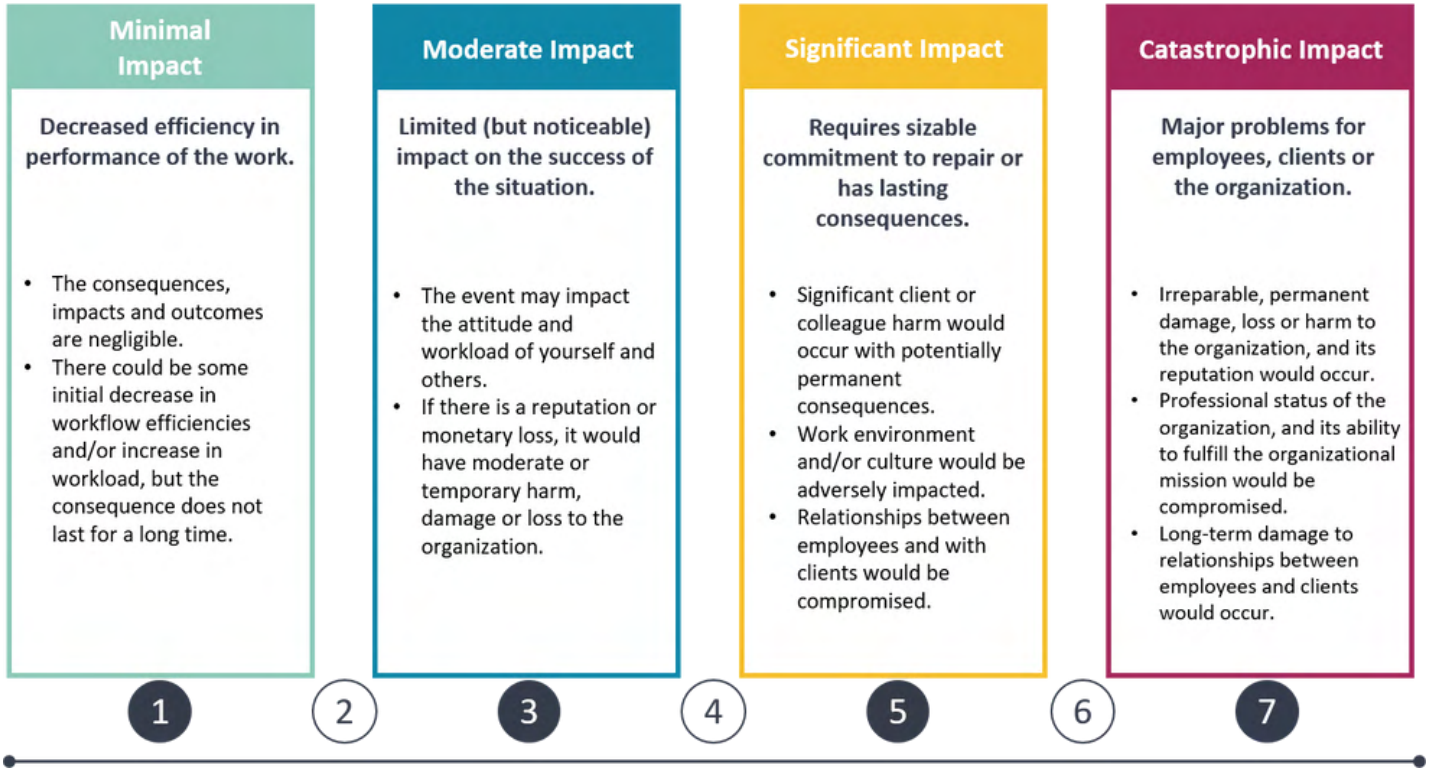
This is a very different proposition than just making learning solutions available in the workflow. We've been doing that for a long, long time. Before we had 24/7 access to elearning courses, we had video training. Before that, we had printed tutorials, and before that, on-the-job training. The challenge with these on-the-job learning solutions is that they often require people to stop working, move through a learning experience of some kind, and then resume work. In this model, learners face the same challenge they do with classroom training. Once they complete a self-learning module, they still have to figure out when and how to apply what they learned to their actual work. Workflow learning shouldn't be defined merely by where the learner is when she learns. That is part of it. But it also needs to be defined by the degree she is able to learn while she performs her work.

The Four Dimensions of Learning

	Stop Work to Learn	Learn While Working
Intentionally Learn	When people stop working to access and participate in pre-determined instructional experiences designed to encode knowledge and skills into their long-term memory.	When, people are assigned to reinforce, adapt, solve, or change how they perform while they do their work using intentionally orchestrated support (Ex. EPSS).
Unconsciously Learn	When people stop their work with no orchestrated support and they figure out, on their own, how to do their work, improve their performance, solve a problem, and recover from the mistakes they make while doing it.	When people use intentionally orchestrated support in their workflow to: • Apply, as they perform successfully over time. • Solve, as they perform unsuccessfully and then recover. • Change, as they adapt to changes in their work.

Guiding Principle 2: Mitigate the risk of failure.

There are tasks that merit pulling people away from their work to learn. To help determine this in a defensible way, we've developed what's called "Critical Impact of Failure" analysis (CIF).



This scale is a tool that helps determine which tasks actually merit the investment of formal training. For the most part, job tasks that score a 1 through 4 on this scale can be safely learned while people do their jobs (using an EPSS). If they make a mistake while they are using the EPSS, they can recover without significant to catastrophic impact on the organization or anyone's lives. This is "safe failure". A properly designed EPSS can help performers quickly recover and learn by doing so in the flow of their work.

However, those tasks that score 5 through 7 merit the rigor of effective instruction that must include feedback and checking for an appropriate level of mastery. Your workflow learning strategy must distinguish between tasks that can be safely and solely learned in the flow of work from those where the impact of potential failure requires stepping away from work to learn, combined with ongoing support as they transition back into the flow of work.

Guiding Principle 3: Provide immediate, intuitive access to micro-learning bursts.

The shift to workflow learning is rightly pushing organizations to break their lengthy courseware into stand-alone micro-learning bursts. Clearly, there are learning moments in the workflow when learners actually need to step away from the work they are doing. But workflow learners don't have

the time or disposition to search for and move through a lengthy elearning module or watch a 30-minute video. What they need is instant access to just the learning they need (no more than they need) at their moment of need. Technology today provides us the ability to offer self-paced micro-learning bursts, proactively and reactively. These personalized content management systems are impressive, but technology alone can't carry the day. The creation of micro-learning bursts isn't a straightforward effort. It requires altering the instructional design process to accommodate this need while at the same time providing the means of weaving these micro-learning bursts into more comprehensive learning solutions. We also need a systematic methodology for breaking existing courseware into effective micro-learning components. It doesn't work to simply push a "Humpty Dumpty" course off the wall and break it into a bunch of micro-learning bursts. We need to do this in a way that learners can put all those micro-learning pieces "back together again" in their minds and skill sets.

Guiding Principle 4: Pursue Adaptive Learning.

All performers have knowledge gaps, and those gaps dynamically form as people forget over time. These gaps are different for every person. Historically, our only option to fill these gaps has been to pull people away from their work and push them through "refresher courses". This approach is wasteful and anything but refreshing. Here's the great news: there exists today technology-enabled methodology that can proactively push learning checks into the workflow. These non-threatening learning checks employ remarkable algorithms that "adapt" based upon the response of each workflow learner. It helps workflow learners find their personal knowledge gaps and access micro-learning relevant to their specific needs. All of this can be tracked and documented for accreditation or regulatory compliance.

Guiding Principle 5: Accommodate Unlearning to Relearn.

The greatest threat to learning, whether in or out of the flow of work, is change. "Unlearning to relearn" is the most challenging training we can ever do. In *Fostering Change in Institutions, Environments, and People*, Richard E. Clark authored a chapter titled "Resistance to Change: Unconscious Knowledge and the Challenge of Unlearning". In it, he explains that roughly 70% of adult knowledge is fully automated, and deeply learned knowledge is very difficult to unlearn. This challenge will never be solved by pulling people out of the flow of work to learn. It's within the workflow that learners have context and the opportunity for ongoing reinforcement over time that overrides automated skills with new skills. These dynamic learners need 2-click, 10-second access to the right level of support to perform in a new way with new understanding. Every workflow learning strategy needs to have in place a plan for leveraging people, technology, and processes to accommodate unlearning to relearn.

WORKFLOW LEARNING BARRIERS

There is a LOT to say about how workflow learning has been and continues to be challenged. According to Bob, these are the two biggest roadblocks to workflow learning taking a more prominent role in most learning strategies:

- A fear that workflow learning is something "new and untried" (while traditional training is something we already know and are accustomed to).
- A belief that workflow learning is expensive.

Here, he addresses both:

First, workflow learning has been around since the early 90's when Glory Gery first coined the acronym EPSS (Electronic Performance Support Systems). In her work, she refers to the "unconscious learning" that occurs in the workflow when performers are provided the guidance of an EPSS. Actually, performers are always learning in the workflow. The challenge has been for us to intentionally support it. There are a number of workflow learning tools, design models, and

consultants who have been successfully implementing it for years as they have put in place the performance support infrastructure that enables optimum learning in the workflow while working.

Second, gone are the days when developing this performance support infrastructure was costly and delivered a focus or impact that was too limited. Today's authoring tools use the latest advances in XML single-source publishing, allowing learning departments to rapidly create content while producing multiple deliverables at the same time. For example, a learning group can author a single set of content for a sales program or desktop application, which can then be used to produce training manuals for the classroom, an embedded moment-of-need performance support system for the desktop, mobile learning assets, and a support tool for the helpdesk to decrease call volume. Not only does this cut down on development time and expense, but it also creates a robust 5 Moments of Need solution that supports an employee throughout the entire learning journey. This content is also easily maintained and redistributed in real time, guaranteeing that the learner has access to the latest information. This is far more than traditional training or elearning alone could ever attempt to accomplish. The greatest benefit of all is that learners are more productive and spending less time searching for information while trying to do their jobs.

Conrad also writes about overcoming barriers to workflow learning. Here are his thoughts on two major issues that practitioners have shared with him and how he advises them to respond:

We have had some great discussions about the barriers that stand between learning professionals and successful workflow learning projects. Here are a few that have been shared with us:

- Politics (this takes the number one spot): This can be one of the most difficult barriers to get past. The good news is that when you overcome the political barrier, budget and technology tend to take care of themselves.
  - "Politics" can be categorized into two major areas: fear (of change) and ignorance.
- Risk: Growth means change, and change involves risk – stepping from the known to the unknown.

So, how do we respond to these challenges? We've summed up what practitioners have found helpful and added a bit of our own experience here:

1. Be clear about what workflow learning is and is not, and what it can do for your organization. Establish a communication campaign that includes your learning organization, line-of-business leaders, and ultimately the performers.

2. Find a business sponsor or champion, someone outside of the learning and development organization, who understands the benefit and is willing to go to bat for the project. Make sure this person is well-versed in the benefits and well-respected in the organization. The more directly this person's team contributes to the bottom line, the better. You just need a good win at the start! It doesn't need to be an Olympian win or one that requires herculean effort. It just needs to be simple and meaningful enough to win the confidence of your business sponsor. You will win the politics battle one project at a time in the early stages of organizational workflow learning maturity.

3. Find out who will be impacted by your 5 Moments of Need project. Understand any anxieties, fears, and concerns. Listen and take notes. Resist the urge to jump right in and describe your project as the ultimate solution. Don't oversell it or become defensive. This is where you gather the information you need to guide you in your project. It is also a forum for clearing up any misunderstandings (e.g., "Workflow learning will replace training," "It will slow down our systems," etc.).

4. Socialize any metrics you can gather that support extending learning into the workflow. Put together a business case with a strong measurement strategy by comparing the cost of a 5 Moments of Need solution with the benefits of a more efficient and effective workforce.

Furthermore, Conrad offers warnings about and suggestions for how to avoid the potential "quicksand" surrounding workflow learning:

Agree on Definition and Scope

Every organization needs to clearly define what workflow learning is but even more importantly what it isn't – because it's in the "what it isn't" that you'll find the quicksand. Most organizations have entrenched formal training practices and systems. It is absolutely unwise to take the position that it will replace those efforts. Some of the early advocates of workflow learning walked right into this sand trap. In the early stages of any workflow learning strategy, you need to focus on complementing and extending all that goes on in the formal training environment. Besides, the informal learning arena is where workflow learning delivers its greatest impact. Informal learning is everything people do outside traditional training events to perform effectively.

Focus on Workflow Process

Ignoring process is a real sinkhole. At some point, organizations that ignore the workflow while they produce 5 Moments of Need solutions will find the ground suddenly moving out from under their feet. Business process is the most helpful framework performers can use to store, retrieve, and then act upon what they have learned as they do their work. What is more, the business impact of all we do under the charter of teaching, training, and learning is determined by the degree to which these efforts result in people successfully moving through processes that deliver business value.

Now, this need to focus on process is not unique to workflow learning. But workflow learning

ultimately becomes a mass of focused job aids with no overarching organizational structure. Business process provides a logical framework for tying together all we build and deliver in support of performance.

Provide an EPSS

An EPSS is the tool that provides the needed service of connecting all the performance support assets into a logical framework. As stated above, this framework needs to have, as its backbone, the workflow processes you're called upon to support. This Digital Coach also needs to provide the following services:

- Role-Based Access: Each performer needs to be spared content and tools that are irrelevant to their work.
- Immediate Access: This is a vital capability. At any moment, performers need timely access to just what they need. Two clicks is acceptable. Three clicks might work. At four clicks you stand a good chance they'll never take the trip.
- Scaffolding: The EPSS needs to do more than just present performance support options. It needs to present them in a framework that puts the right amount of support in front of your learners at the right time. An effective EPSS allows the learner to efficiently choose the amount of support they need immediately, without having to journey through unneeded "layers". This EPSS should scaffold the content in a way that presents the information at a detailed layer that ranges to a more robust one, allowing the learner to choose the most appropriate amount. These amounts and entry points should be apparent, logical, and guiding.
- Ability to Zoom In or Out: Once performers have found the help they need, they also need the ability to dive deeper (into greater detail) or back out to obtain a broader view, so they can see what they are doing in the context of their overall performance requirements.

Don't Attempt to Boil the Ocean or Board a Sinking Ship

Start small and focused. Then, grow your 5 Moments of Need influence. And for any project you take on, do your homework so you know that it will succeed and yield recognizable benefit to individuals and the organization. Your initial steps into workflow learning need to be unencumbered. They need to have the best chance possible to demonstrate the value of your 5 Moments of Need solutions. Workflow learning is at the heart of that value.

Too often, well-meaning proponents of the 5 Moments of Need and workflow learning rush in to help whenever they hear the cries from a failing initiative. There will be plenty of sinking ships to save down the road. A safe policy, as you begin, is to wait to take on troubled projects until after you have established a winning track record.

We often talk about the advantages of picking the lowest hanging fruit, but that isn't always the best path to take. Our family has a small organic orchard on our property. Because we don't spray our trees, sometimes the low hanging fruit is partially eaten by bugs and birds, or even by one of our goats that has somehow escaped its pen. So, in our garden area, whenever I reach out to pick an apple, I generally bypass the low hanging fruit. Often, my search takes me higher into the tree. You may want to consider doing the same thing as you determine which workflow learning projects to

take on. In the beginning, you need to be selective and make sure the fruit you pick is something someone will want to eat: it has narrow scope, the capacity to deliver high-yield return, and clear potential for success.

"Start small and focused. Then, grow your 5 Moments of Need influence. "

Prepare for the Challenge of Maintenance
The greatest challenge in any effort within the workflow isn't in building effective solutions. The real rub is keeping it all current. Early on, this may not be so apparent, but at some point along the way, maintenance turns into quicksand – unless you have planned ahead and made provisions for it.

Don't let this threaten your resolve to pursue learning while working at the 5 Moments of Need. The benefits outweigh this and every other challenge. But wisdom dictates you think this through and then take on learning content management (if you haven't already). Best practice in this area calls for XML-enabled multi-channel publishing where content authors write once, translate once, and then publish from that single source of content out to all the different forms needed by performers (e.g., a printed job aid, an online help file, a web reference guide, a student manual for classroom learning, and an elearning module). This capacity isn't vaporware. It can and is being done, and it is clearly cost justifiable. This is where the efforts to build reusable learning objects should have been directed in the first place!

Invest in an Overarching Strategy
Many years ago, I challenged my future brother-in-law (who was 10 years old at the time) to a game of pool. He cleaned my clock. At one point during the trouncing, I asked Brandon to explain his secrets for success. He responded with, "I just hit the ball and hope for the best."

Now, this approach worked for Brandon in that particular game, but sustained success over time requires more than brute luck backed by hope. As you move forward to embrace the power of the 5 Moments of Need, invest in a plan that will ensure you the greatest potential for a high-yield return on your efforts. Workflow learning has much to offer. The trip is well worth taking. But your success requires a plan that includes charting a path around the quicksand.

As a final word on barriers and pitfalls, Conrad advises practitioners to aim for proactive vs. reactive workflow learning:

The challenge of workflow learning today isn't a lack of resources. There is, in most organizations, a proliferation of those. The challenge is getting to the right resource in a timely manner. The moment of Apply seldom affords the luxury of time required to go searching for resources when they are scattered everywhere.

This is a "reactive" approach to workflow learning, and some organizations have set this as their strategy. We often see reactive workflow learning embodied as a SharePoint site with strong search capability. Performers are expected to access the site and either go searching or drill down through menus to get to the right information. Here's what's wrong with this approach:

- It takes too much time and energy for performers to get the specific resource they need. In the pressure of the moment of Apply, performers need to get to the specific resources they require within 2 clicks and then sort out what to do within 10 seconds – for an organization to function optimally.
- Performers often won't take the time to search out the right resource. Instead, they will either forge ahead and guess their way to limited success or they will fail.
- Performers will often choose a dependency approach and will tie down other people (including peers) to help them sort out their performance needs. This is an expensive approach. It pulls peers away from their work. There is also danger with going to peers because they can potentially be unconsciously incompetent: they don't know that they don't know and, worse yet, they might be confidently incompetent and convey that confidence to those they think they're helping.
- There is little chance of optimizing the time it takes to gain and sustain on-the-job competency.
- It is difficult and likely impossible to adequately accommodate the 5 Moments of Need.

There is much more that can be said regarding the limitations of reactive workflow learning – where performers have to sort out what they need when they need it and pull everything together to support effective performance – but here is the bottom line: reactive performance support is a flawed strategy, regardless of the technologies that may attempt to make it easier.

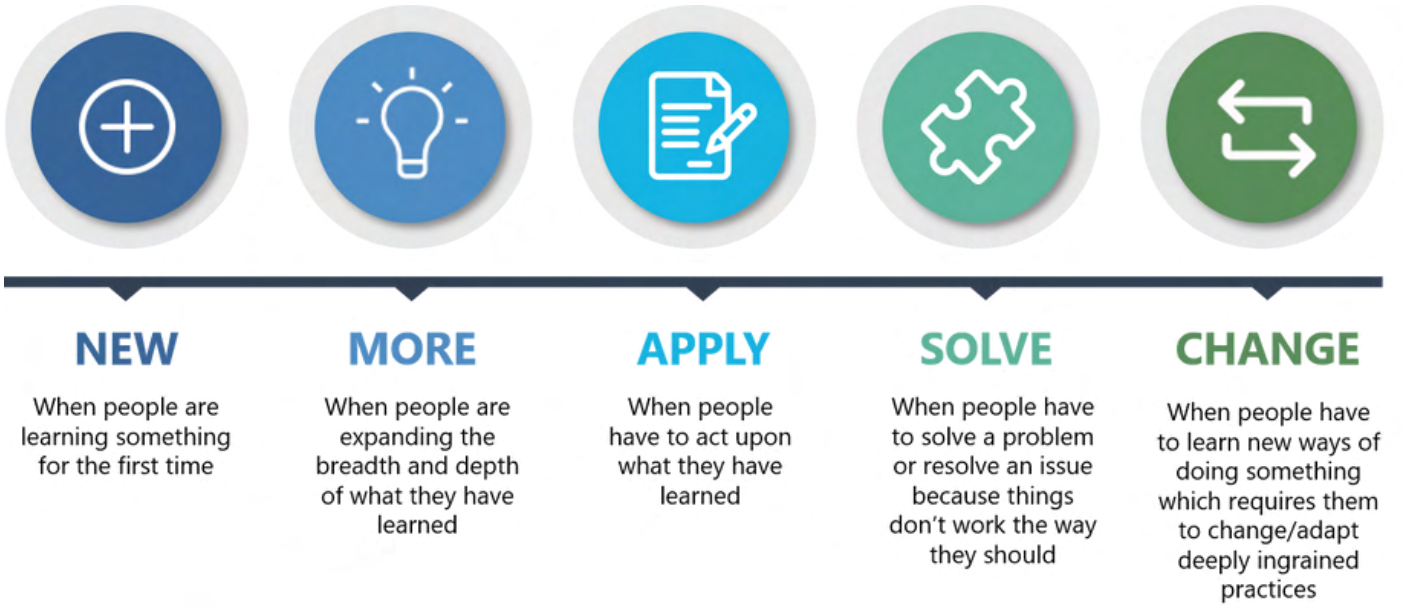
Elliott Masie uses the analogy of a GPS to describe what workflow learning should be today. A GPS is anything but reactive! It knows where you are and once you have told it where you need to be, it proactively guides you to that place. If you make a wrong turn, it helps you recover. A GPS can even identify potential problems ahead and offer suggestions for an alternate route to optimize time to arrival. It's this kind of proactive workflow learning that organizations need to pursue and that we need to develop and deliver: EPSSs that anticipate the contextual requirements of performers and offer them 2-click/10-second access to just what they need at their moment of need to enable effective performance at every changing moment.

WORKFLOW LEARNING MISCONCEPTIONS

In addition to the barriers Bob and Conrad have already addressed, some areas of confusion about workflow learning need clarification. Let's explore a few of them now.

70:20:10 and Workflow Learning: Blurred Concepts

Workflow learning is based on 5 Moments of Need, as defined in this graphic:



Later, we'll get into much more detail about the 5 Moments. We bring them up now because, as Conrad explains here, it's easy to conceptually blur the 5 Moments of Need and 70:20:10 models. The 5 Moments illustrate the context under which learners must learn and what drives them to engage in learning. These drivers are relevant to what is going on in the workflow at any given moment and how the learner can react to the challenges of the work.

Learners live in the moment of Apply (where they do their work). At the same time, they must always be ready to respond to the other moments of learning need: when something changes or goes wrong, and when they must learn something new or more. These 5 Moments are not linear and can happen at any time. They also build on each other and in the process of working through them, learners gain and sustain effective performance in their work.

In contrast, 70:20:10 is about where the learning takes place: in the workflow (70%), through collaboration with others (20%), or in a formal training environment (10%). In the real world, of course, these percentages may vary from project to project.

In effect, the 5 Moments allow us to operationalize 70:20:10. By designing solutions focused first on addressing the moments of Apply, Solve, and Change (which occur in the workflow) and then addressing the moments of Learn New and More, which can occur in and out of the workflow, we

can optimize the learning experience in all three portions of 70:20:10. L&D leaders are using both the 5 Moments and 70:20:10 frameworks to make the case for extending their reach of responsibility into the workflow.

A "Learning" Mindset vs. a "Performance-First" Mindset: What's the Difference?

If you step into the workflow learning arena with a “learning” mindset, you will fail. A traditional learning mindset will never get you to the right place when it comes to workflow learning because it will leave you stuck in the narrow framework of micro-learning and fail to lift learning to its rightful place in the organizations we serve.

Here are more of Conrad’s insights on why a “performance-first” mindset is critical to workflow learning:

I have been engaged in helping organizations design, build, implement, and measure Learning Experience and Performance (LEaP) solutions that address all 5 Moments of Need since 1984. Workflow learning is not a new approach for me. I have experienced first-hand how workflow learning can transform organizational learning. But this transformation requires a performance mindset – not a learning mindset. This performance mindset focuses first on the moments of Apply, Solve, and Change. And when you step into the workflow with this performance-first mindset, the right things always happen.

In contrast, here's what happens when L&D teams with a learning mindset take on workflow learning. They deconstruct their traditional “macro-learning” offerings into micro-learning components, up their game with knowledge management practices, and then, with the aid of technology, make those micro-learning objects

"If you step into the workflow learning arena with a 'learning' mindset, you will fail. "

available to learners within their places of work. By doing this, they assume they are delivering on the promise of workflow learning, but nothing could be further from the truth.

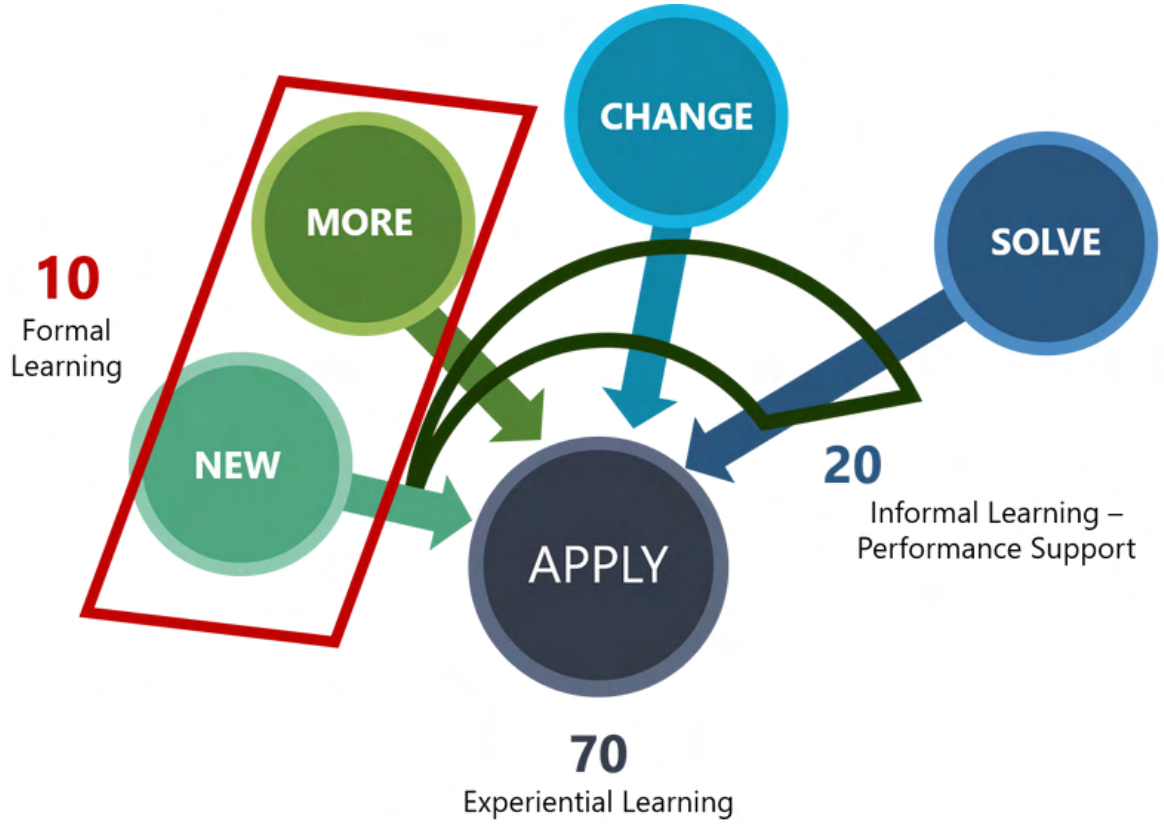
- Context: The reasons for learning are proximate and clear.
- Engagement: The learner is engaged at both the intrinsic (job satisfaction, sense of contribution, feelings of success) and extrinsic (recognition, pay) levels.
- Reinforcement: Learning is spaced and validated by success.
- Integration: Experience unifies skills into a well-balanced set.

Small, targeted learning experiences that some call micro-learning or learning bursts are good, but there is so much more that we can and should do under the real umbrella of workflow learning. When 5 Moments solutions are designed with the moment of Apply as the primary mindset, a broader, performance-based solution emerges with three significant benefits:

1. The time required for employees to stop their work to learn is, on average, cut in half. How? By pushing task and supporting knowledge learning, where there is minimal consequence of failure, exclusively into the workflow. These skill areas can be readily learned while people do their work. This is enabled by 2-click/10-second guidance from a properly designed EPSS. That design, of course, needs to accommodate all 5 Moments of Need.

2. The time required to achieve effective performance on the job is always shortened. The extent of this "shortening" depends on instructional and environmental factors. But here's what you can count on: always, the longer it takes to achieve competent performance on the job following traditional training approaches, the greater the reduction of time to effective performance when you shift to a 5 Moments of Need support solution.

3. We see a reduction in error rates, particularly with skills where the critical impact of failure could be significant to catastrophic for people and/or the organization. Of the three numbers in the 70:20:10 ratio, we find the least understood to be the "20". This number represents learning through collaboration. This type of learning is increasingly aided by technology. As shown by the arc in the figure below, the collaborative learning space spans all 5 Moments, but on a sliding scale. In the moments of New and More, collaborative learning is less impactful (the narrow, left end of the arc). But as learners move into Apply, Change, and Solve, the arc widens, indicating that learners tend to become much more collaborative, particularly in the moment of Solve.



Learning and Development stands at the threshold of a magnificent opportunity. The stars of methodology, technology, and organizational readiness are aligned like they have never been before. We can forever change how learning is viewed and, more importantly, how organizations perform at the tactical level. It all begins with a shift in mindset that embraces all 5 Moments of Need, with the moment of Apply leading the way. This mindset shift leads us properly into the workflow with solutions that enable effective performance all the time, everywhere.

Methodology or Technology? What Comes First in Workflow Learning?

One of Bob's favorite sayings is, "Methodology begets technology." In the case of workflow learning, that is absolutely true. Without an underlying design methodology in place, no EPSS or other technology will help an organization realize the full benefit of workflow learning. Bob has often shared this statement: "Just because I can swing a hammer doesn't mean I'm a carpenter." The hammer is the tool, but applying the discipline of carpentry makes one a carpenter who can successfully design and build something. The same goes with an EPSS. It is the hammer (the tool) and NOT the discipline. A sound and proven workflow learning design methodology needs to be applied so that these tools create effective workflow learning deliverables. Bob has written about this truth in a few blogs. Here, he explains it in more detail:

Support comes in all shapes and sizes. Our learning industry tends to emphasize the physical tools, like EPSS or paper-based job aids, because they are often seen as the most effective approaches, both in time and cost. The danger of being overly focused in these areas is that we can lose sight of some of the other critical components of a learning ecosystem. For example, assets like help desks, trainers, and line managers are often overlooked in a blended learning strategy. Because the

learning group doesn't see these assets as being under their control, they are often overlooked for the vital role they play in allowing a blended approach to work. Since workflow learning intentionally puts more emphasis on the informal side of learning, help desks, trainers, and line managers need to understand their part in the workflow learning process. Their support and understanding of this cannot be assumed. They need to be included in the early design discussions and taught their role in the overall process and application of performance support tools. For instance, many help desks are not taught or incented to direct a learner to an EPSS first. They want to get learners off the phone and back on the job! That is an important but often shortsighted objective. The ultimate goal is to create an independent learner who doesn't call the help desk for every task or problem. This approach will not be adopted if they and other assets in the ecosystem are not considered and guided.

While it's true that an effective workflow learning solution needs a well-designed tool or application upon which it is built, that does not guarantee success. In fact, the technology can get in the way. We've seen organizations obsess on tools and their deployment to the degree that it blinded them to more important factors that should have been considered. In some situations, having "the tool" was going to outweigh and override any possibility of failure. The irony is that taking this approach ultimately guaranteed failure. One of my grandfather's favorite sayings was, "Just because someone owns a hammer does not make them a carpenter." (There's an art form to moving from a weekend handy man to a professional cabinet builder. Buying the finest and most expensive tools in the world will not bridge that gap.)

"...technology can get in the way."

We need to look at workflow learning in the same way. When we have walked organizations through the complete journey of successfully delivering a workflow learning solution, we often pivot on 5 key steps: analysis, design, development, implementation, and measurement. The tools to build workflow learning play a key role in the development phase but, kept separate from the other 4 stages, tools alone can cause the overall outcome to fall short.

Two stages that are typically overlooked actually bookend the process: analysis and measurement. We have found that the stages in the middle are much easier to execute and maintain if these two are given the right amount of attention. Analysis and measurement walk hand-in-hand throughout the journey, each feeding off the other. Analysis paves the way while measurement prepares us for the next step. Typically, this means continually repeating the 5 stages for the full lifecycle of the workflow solution. This involves thinking well beyond the initial implementation and not seeing the lifecycle as linear or limited, but rather as cyclical and evolutionary.

Keeping one's eye on these two critical stages, allowing them to work in harmony with each other, can make any workflow learning tool that much better and effective. A weak tool taken through an effective and comprehensive workflow learning lifecycle will usually outperform a stronger tool used in a silo or vacuum.

One area of caution: don't OVER analyze or measure. These stages are meant to enable – not paralyze. We've all heard of, or even participated in, the infamous "analysis paralysis" design process. Get in there and get your feet wet! There is a fine line between being a responsible steward to these stages vs. ineffectively letting them dominate to the point that they crush the process under their own weight.

Keeping tools in perspective and valuing the overall workflow learning lifecycle can help guarantee a powerful and sustained solution!

WORKFLOW LEARNING MYTHS

There are several persistent and pervasive myths about workflow learning that we'd like to refute, based on our experience and that of a few of our well-respected workflow learning colleagues. We hope debunking these myths will give you a clearer picture of what workflow learning is and isn't, and what it does and doesn't do.

Myth: "Performance Support" and "Workflow Learning" are One in the Same

Performance support encompasses many types of deliverables. Each can contribute to the discipline of workflow learning.

Let's start by defining performance support. Here, Conrad provides our definition and goes into some detail about when and why performance support is necessary:

"Performance support provides intuitive, tailored aid to a person at his or her moment of need to ensure the most effective performance." – Gloria Gery

As we stated previously, there are five phases (aka Moments of Learning Need) that people pass through that require support so they can successfully perform. The learning industry has primarily focused its practices on the first two: when people are learning how to do something for the first time and when people are expanding the breadth and depth of what they have learned.

Documentation teams have primarily assumed the responsibility for providing printed and online help information for people to use when they face the third moment of need: when they need to act upon what they have learned, which includes planning what they will do, remembering what they may have forgotten, or adapting their performance to a unique situation.

Help Desk practices have also assumed a role in supporting people in that third area of need, but their primary work has been to address the fourth moment: when problems arise, or things break/don't work the way they were intended.

Finally, there is a moment of need that few organizations have addressed well: when people need to learn a new way of doing something, which requires them to change skills that are deeply ingrained in their performance practices.

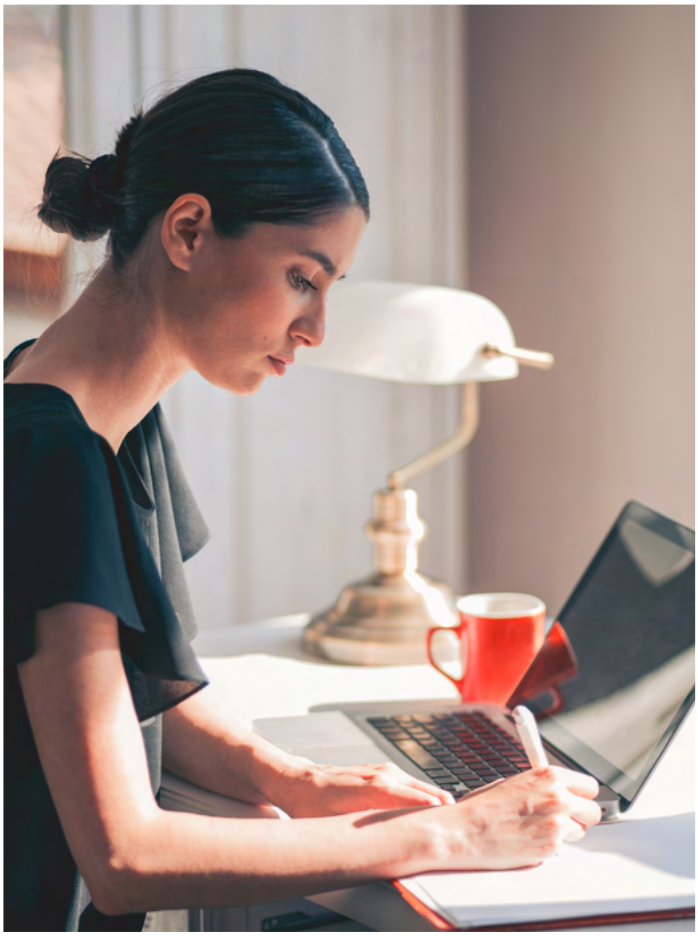
So, what is "intuitive, tailored aid"? Performance support resources are intuitive and tailored to the degree that they:

- Are readily and logically available. The harder people need to work to get to a job aid, the higher the probability they won't access it.
- Are simple, straightforward, and role-based. Tailored aid must be focused directly upon the specific role of the performer as well as the situation they face. It can't contain irrelevant information. It can't be "fluffy".
- Map directly to the way a person actually performs. The most logical way people approach performance is by business process. Process maps provide performers the capacity to "keep it all together" and not become lost in detail.
- Are integrated to allow deep diving. As any organization's performance support practice expands, at some point they will face the challenge of job aid proliferation. This calls for development (sooner rather than later) of an EPSS to help ensure that aid is not only readily

but logically available. These Digital Coaches must also allow performers the option to dive deeper into learning at every moment of need.

What is “effective performance”? Effective performance must inherently include efficient performance: it isn’t truly effective if performance is achieved in a wasteful manner. Effective performance must also embrace collective as well as individual actions. It must also be time independent. In other words, effective performance is achieved by helping every person in an organization work together to successfully perform their work without any wasted effort at any time of any day.

It is important to note here that the discipline of performance support is broad and encompasses any and all efforts to contribute to effective performance on the job. Workflow learning that supports all 5 Moments of Need requires a specific type of performance support solution—a properly designed EPSS. This performance support deliverable orchestrates all relevant support resources at the job task level.



"A true blended learning program would architect learning and support assets that both teach AND support."

Myth: Workflow Learning Eliminates Training

This is such a frustrating myth. Why does our learning industry continually position new methodologies as replacements for ILT? Workflow learning cannot and should not replace formal training. Workflow learning without training is about as effective as training without workflow learning. The two combine and complement each other to form a complete solution that covers all five areas of need. Now, with that said, an effective workflow learning strategy can clearly change the way we look at training. In many instances, training can be shortened. In some rare cases, it can even be replaced. But these changes are only warranted after an exhaustive look at the current training audience and

intended outcomes.

Here, Bob explains why workflow learning doesn't replace other learning approaches and how a true blended learning program should be structured:

Workflow learning should not be a replacement for existing learning approaches, but rather seen as an on-the-job enabler that makes the entire learning experience that much more effective. Blending isn't easy. It's not good enough to simply offer many options and think that learners will choose effectively. In fact, some research implies that, if left to choose on their own, learners may make poor learning choices. It is up to each training department to help their organization define and adopt a blended learning strategy that maps to its existing learning culture and outcomes. Only when these issues are considered ahead of the options do effective blended learning programs emerge.

Many blended learning programs are really blended training programs, meaning they only address moments 1 (Learn New) and 2 (Learn More). We take learning assets designed to help people acquire knowledge and mix them up. Rather than keep them with us for 5 days of training, we only bring them into classrooms or virtual sessions for 2 days. The remaining 3 days are covered by elearning, reading, assessments, or other related tasks. This approach isn't instructionally bad. In fact, it's a fairly compelling economic model, but it's not blended learning. In the end, the learner is still left on their own when they move through moments 3 – 5 (Apply, Solve, Change) and have to survive in the real world.

A true blended learning program would architect learning and support assets that both teach AND support. We have been designing for the formal domain for years, but now with the advent of technologies like social learning, mobile learning, and performance support systems, our ability to meet the final 3 moments is more powerful than it's ever been. The most important thing is to make these informal efforts as intentional and sustainable as we have made the formal efforts. These tools also need to be introduced during the formal program. They need to be taught and reinforced. When done well, much of what we used to include in formal training can be introduced and reinforced during the informal experience.

Blended training needs to embrace all 5 moments and become true blended learning where both formal and informal learning are mixed to serve our learners throughout the learning lifecycle.

Following Bob's thoughts and guidance, our wonderful colleague and experienced workflow learning practitioner Gary Wise addresses the "workflow learning replaces training" myth in a guest blog post he wrote for us in 2012:

"The integration of workflow learning does not eliminate training, but it may very well reflect upstream and give you a chance to reduce the amount.

I am convinced that the crux of the problem [what blocks workflow learning from becoming a strategic initiative] is not the discipline of training, nor the lack of excellence of the efforts of our

training teams, but the implications of long-term results falling short…the difficulty of transferring effective execution from classroom/elearning course completions to the point of work. These disappointing results are what pop into the heads and hearts of business stakeholders when they hear the "T" word.

The rules of engagement have changed, and training is still playing from an outdated playbook.

The workplace seems to be increasingly characterized by continuous velocity…continuous need for flawless execution at the point of work… handling continuous aspects of change – from policies, to procedures, to the competitive landscape, to [insert variable of your choice here] in an agile and effective manner. What confounds me is why any business would tolerate NOT supporting performers at their moments of need, especially when those needs are equally as continuous…AND…when those moments of need are tied directly to driving business outcomes…or failing to do so. This point by itself should be enough of a reason to treat workflow learning as a strategic initiative.

If you have ever been involved in writing strategic goals or formulating strategic initiatives, one thing is consistently present: an explicit alignment with the creation of value and/or protecting value that already exists. All too often, training gets the nod within one or more initiatives to deliver results, but we fail to recognize that nobody closes sales in a selling skill training class. No customer service representative saves a key account in distress during an online course. No manager effectively handles a tough performance conversation that prevents employee turnover in an interactive role play. No decisions to avoid the creation of material waste are made during simulations, nor are business liabilities mitigated during role plays. We try and we try to tie training to business impact. Our track record sucks because 20% or less of us even pursue level 3

[Kirkpatrick] evaluations and 10% or so go to level 4...and a paltry +/-3% may attempt a level 5 ROI.

What this tells me is there is a disconnect between training and the generation of tangible impact."

Finally, another of our dear friends and highly respected colleagues, Dr. Allison Rossett, also addresses the myth that workflow learning eliminates training in her 2012 guest blog post, which she titled, "Training LOVES Performance Support & Performance Support LOVES Training":

"I don't want to kick training to the curb. Instead, I want to bring performance support and training together. Why?

- You have to know something to effectively use performance support for matters of meaning. Take knowledge workers like doctors and Army captains. Their education is substantial, with significant investments in moving smarts into their minds, hearts, and bellies. Let's presume these doctors and captains know their stuff. Would the savvy ones have reason to turn to performance support? Of course. Things change. There is so much to know. An error can be catastrophic.
- Consider physicians. The PDR (Physician's Desk Reference) is an example, as are mobile checklists used in operating rooms, and even expert networks turned to when something unforeseen happens in surgery. Could just anyone use those tools to diagnose illness, avoid negative drug interactions or successfully complete the surgery? I doubt it.

Humility about transfer is in order. Training, of course, is an investment that most companies would willingly make, for example, for their mutual fund managers tasked with deciding which stocks to buy and sell.

- Alas, transfer, for fund managers (and everybody else) is by no means certain. Only 25% of business managers reported that training and development contributed measurably to business performance, according to McKinsey's Aaron DeSmet, Monica McGurk, and Elizabeth Schwartz. Roy Pollack and Andy Jefferson from 6Ds Company asked over 1,000 learning leaders to estimate the percentage of trainees who use what they have learned long enough and well enough to improve performance. The leaders' estimates routinely average 15%!
- What can we do about these grim figures? Performance support is one good answer. Performance support moves lessons from the classroom into the workplace. Back to the mutual fund managers. Not only is their world complex and high stakes, but it is also buffeted by current events. Performance support can make certain that lessons taught in February are revisited in April, refreshed to match weather events in the North Sea and clashes in Benghazi.

Leaders request training but prefer less of it. This creates an opportunity for collaboration between training and performance.

- When you talk to executives about the training they have requested, it won't be long before they ask for a haircut. "That three-day seller class, we can only afford two days." "That session for engineers, let's put it online and reduce it by a third. They're smart." Executives don't want their sellers and engineers in class. They want them at work, with customers. This creates an opportunity to raise questions about what must be known by heart and what can be referenced or supported at the moment of need. Answers then enable rational decisions about when to train to memory and when to surround with assets that boost performance – and in what combination.

A Great Relationship for Performance Support and Training:

Nobody would mistake me for a marriage counselor, but for training and performance support, for these two, I have ideas about making it work. Like every relationship, the issue of integration soon rears its head. How tight should training and performance support be?

- Stick performance support smack dab in the middle of training. Let's visit a conflict resolution workshop. In order to prepare to participate in role plays during the event, managers are encouraged to look to performance support, which takes the form of a summary of key concepts and pointers regarding best practices and frequent errors. Immediately after the role play interactions, participants use checklists to self-assess and structure feedback. Conflict resolution is a tough challenge that demands powerful medicine. That is available when training and performance support are tight.
- Stick training smack dab in the middle of performance support. Let's follow a participating manager back to the workplace. Two months after the class, he runs into a situation where he must apply what he learned about conflict resolution. He reaches for the mobile support tool to which he was introduced in class. Now, before he meets with warring associates, he reviews the guidelines. Still, he's not as comfortable as he wants to be before entering the fray. Willing to invest a little more time, he selects a link to a short podcast that reviews approaches to conflict resolution and then wraps his preparation up by identifying errors in two short sample interactions. Now, armed with the performance support and the training, both delivered close to the challenge, he's ready to take it on.

- Put a jacket on the challenge. Being tight and fully integrated is nice, but it is not sufficient. Let's focus on the value of putting a jacket around the task: being at the ready, nearby, to help the performer be thoughtful about the effort.

- Performance support of this type stands just prior to and just after performance, rather than in the midst of it. The manager examines a checklist before attempting to resolve the conflict. The auditor has produced a report. Is it ready for submission? Does it meet standards? Does it have its pieces and parts?

It's OK to Embrace Both:

- Training will endure, improved by its relationship with performance support. When results are the goal, training should not find itself alone and automatically top of mind.

- For doctors, instructional designers, and airline pilots, programs will involve a lot of training and some performance support. And sometimes, for tasks that are short, sweet, and meaty, like navigation or picking a wine to pair with a meal, the mix will be mostly support and less training. Could it be only support? It could. Experienced people get much from performance support reminders, advice, and community, building on scaffolding they already possess. Could it be only training? It could, but should it?

"Training will endure, improved by its relationship with performance support."

There is no need to choose between training and performance support. Embrace both and appreciate the many forms that their union will take."

Myth: Workflow Learning is an Add-On to Existing Training

Workflow learning is NOT an add-on! It is a complete strategy and approach to organizational learning and performance that encompasses every aspect of how an employee learns and performs their job.

Bob and Con address this myth in a blog post titled "Change is Hard, but Well Worth the Journey!!":

Too many L&D professionals and organizations still see workflow learning as an add-on to their existing approach. They want workflow learning, but they're not willing to do anything differently to their training models and methodologies. They just want to "add" workflow learning to what they currently do and hope it all works. To do workflow learning right, you must look at all 5 Moments of Need FIRST and adjust accordingly. We recently had a student in one of our workshops say, "I get and agree with all that you're saying, but the problem we face is we have too few resources, too little time, and not enough money to ADD this. My department is already taxed to the max meeting the demand to create our current training materials."

OK, let's examine this statement a bit more. For any L&D department to move to a true 5 Moments of Need approach, they need to change two important things: their mental orientation to what they build AND the methodology they use to build it. Let's examine both for a bit.

The fundamental mistake this very qualified and well-intentioned L&D professional was making, and we see this often, is evaluating the impact and addition of workflow learning from a "training-first" mindset. When Con started his journey in creating the 5 Moments of Need framework, he realized a few fundamental truths. If adopting the 5 Moments of Need was going to work, that journey had to follow 3 rules:

- It couldn't take more time than current design models.
- It couldn't cost more than current design models.
- It couldn't need more resources than current design models.

When we've seen the 5 Moments of Need and workflow learning implemented CORRECTLY, these rules hold pretty true (and some time, money, and resources are even cut). But that starts by NOT designing for training first!

If you do, workflow learning will always be seen as an add-on and not an enhancement to an existing model. Few have extra time, resources, or money for an add-on! If the learning professional referenced above keeps starting with tackling his current training load (and approach) first and hoping to get to workflow learning later, it will never work. Now, we're not saying this change is easy and won't come with some pain and sacrifice (few change efforts do). Many who have made the transition will say that the road to the 5 Moments of Need didn't happen overnight or without any angst. Those who've stayed the course have arrived at an amazing place, but it took work, commitment, and flexibility.

Myth: Content is King in Workflow Learning

When it comes to navigating the workflow, CONTEXT (not content) is king! The workflow is made up of processes, tasks, and the knowledge that supports the performance of those tasks, in that order. Workflow learning assets include checklists, decision trees, videos, learning bursts, social platforms, and lots of user-generated content. Those are the tools of the trade when it comes to designing for this brave new world. So, what is the context of workflow learning assets and why is it so important? Even though an asset is "correct", meaning the information or instruction a performer is seeking can be found somewhere within it, the way in which the asset supports the need is what makes or breaks its effectiveness. Some assets are informational while others are instructional. One may take 15 minutes to watch or read while another is a quick, 30-second interaction. One may go into great detail when only a high-level overview is needed. The list goes on and on. This is why context matters and can make an asset helpful and effective or overwhelming and confusing. When we move learning and support into the workflow, context at every level is king!

Here is more detail about the importance of context and how a lack of it can cause problems for performers from a blog Bob wrote titled "Context is KING in Performance Support":

When a learner is experiencing the first two moments of need (when learning for the first time and when learning more), content remains king. During these moments, learning needs to be instructionally sound and comprehensive. When developing and delivering this kind of instruction, there is an established scope and sequence associated with the content, with learning experiences appropriately interspersed. Events are planned based upon learning objectives. When a learner is in this knowledge acquisition stage pursuing mastery, content continues to reign as king.

But when a learner moves beyond training into the realm of informal support, a new monarch needs to ascend the learning throne. During these remaining moments of need (applying, solving, and relearning), performers need CONTEXT. When we work with organizations on their workflow learning strategy, it's always surprising how many fail to consider this most vital principle. Learners must understand where they are, why they're doing what they're doing, what others are doing, and how it all relates to the task at hand. Performers need this to rapidly access the specific content they need and to act upon that content in the most appropriate way. Content without context is a formula for failure when it comes to workflow learning. Without context, if learners (by chance) find the content they need, it is possible they may end up doing the right thing at the wrong time. Many learners do this every day.

When it comes to workflow learning, CONTEXT most certainly is king. Providing context isn't difficult. Process maps and workflows based on job role and/or project are a key component of an effective workflow learning context architecture. It's equivalent to a well-articulated analogy or metaphor as the setup to a lesson. It's the "you are here" map in the shopping mall. The shopper knows the store they wish to shop in (or they at least know what they want to buy), so they just need directions to the right store in the most efficient and direct manner. Workflow learning is the same thing. Its job is to get guiding information in front of a learner as quickly and effectively as possible. Context is key for this to happen.

As you move forward incorporating context into your workflow learning solutions, it is most helpful to recognize that performers seldom work in a vacuum all by themselves. And, when technology is part of the workflow, they rarely perform on only one system in each workday. For instance, we recently worked with a Customer Relationship Management (CRM) rollout that actually involved 3 different systems throughout the process. It also involved many steps and interactions that had nothing to do with these 3 systems, but each was critical in the overall CRM process. If these non-systems steps were skipped or misunderstood, any work done within the CRM could be incorrect.

Another common problem for performers is that they often don't know where to start. Simply providing embedded help systems doesn't offer sufficient context. Traditional help most often fails to include non-system steps and more seriously almost always lacks any tie to higher level business processes. Help that exists only at the detail or system level assumes the learner knows how to get there in the first place. There are times when a learner will need to enter a workflow learning system from the process level

"When it comes to workflow learning, CONTEXT most certainly is king."

and dig in deeper from there.

Please don't ignore this vital principle. Any workflow learning strategy you develop needs to lead with processes and make them readily available to guide performers into the content they need – and allow them to step back and get the big picture. Content without this kind of context is ineffective, frustrating, and an absolute threat to an effective workflow learning strategy.

Myth: Social Networks and Social Learning are the Primary Tools for Workflow Learning

Social networking can be a highly effective tool as a part of an overarching workflow learning framework, but there are reasons why it may be dangerous to position it as the primary one. Here are some issues to consider:

- Searching, navigating, and digesting a social networking site takes time. A workflow learning framework is made up of shades of gray. Some elements are meant to be experienced over time, processed, and applied, while others are meant to be quick, short, and easy to access, or what Dr. Allison Rossett would call a "sidekick". When a learner expects an immediate answer, they become highly frustrated and disillusioned with resources that don't provide this level of support. Social networking can struggle when positioned as one of these types of tools. Although the information can be vast and powerful, it typically takes time to search and sift through these communities. They are wonderful support networks, but not immediate ones.

- The information can often be dated or incorrect. The number one killer of a workflow learning tool/strategy is inaccurate information. Since many of these resources are accessed at critical moments of need, any wrong answers can have significant consequences. Although there can be a definite "wisdom of the crowd" benefit to these communities, there is a huge overhead in keeping the information current and accurate. Many struggle with maintaining this, making the information suspect.

- Social networks are not often integrated well into the workflow. The most effective workflow learning tools and resources are found within the environment and workflow they are designed to support. The simple fact that many social networking websites are accessed out on a network can impact their ability to act as effective workflow learning resources. An effective workflow learning framework offers an immediate and concise answer to the issue being addressed, often based on the learner's job role or workflow. Although many social networking sites are role based, they are anything but contextual. The more removed a workflow learning asset is from the problem or situation being addressed, the less likely a learner is to stay the course and use the resource.

With this said, how can we make social networking sites work and optimize the power of communities? The simplest answer is to broker them appropriately in the context of all the other resources available through an organization's workflow learning strategy. The danger is that learning assets are often positioned to over promise and under deliver. A social networking community should be positioned as a fundamental tool that can sustain the underpinning of an

overall workflow learning strategy. They are rich repositories of an incredible amount of acquired knowledge from peers, experts, and mentors throughout the organization. That's an amazing resource when consumed at the right moment and under the right circumstances.

Similarly, social learning is and will continue to become a very powerful part of any effective learning strategy, but it's not in and of itself performance support.

We define performance support as "providing intuitive, tailored aid to a person at his or her moment of need to ensure the most effective performance". This is meant to be an all-encompassing definition. It is not technology dependent, although many performance support offerings are technology based. If we look at performance support from this perspective, emerging and other long-standing approaches such as EPSS, social learning, coaching/mentoring, help desks, job aids, and FAQ websites are all subsets of an effective performance support strategy. To say that performance support is limited to a job aid or an online support tool is also limiting its overall effectiveness within your learning organization. It is limiting its ability to be designed, funded, and integrated as a larger and more powerful part of an overall learning architecture.

Myth: On-the-Job Coaching is Workflow Learning

Many learning organizations mistakenly believe they have workflow learning because they have remarkable coaching programs. Disclaimer: we are not knocking coaching programs! Although coaching is a very powerful practice, it cannot be scaled to meet all the needs employees have in their workflows. A coach isn't available 24x7. Plus, the cost of coaching is extremely high because we are tying down other human beings to coach us. And coaches are not infallible. Depending on the day, they can offer excellent guidance, or they can

steer us in inefficient or even wrong directions! The most effective coaching programs coach to independence using an EPSS.

Myth: Workflow Learning and Informal Learning are One in the Same

Workflow learning is one of those rare concepts that everyone "gets" when they first hear it, but then have a much harder time seeing it applied to their situation. There are a number of reasons for this. The most common one is that everyone has been using "informal learning" for most of their professional lives, so why would they pay for it or dedicate resources to it?

This is why we've always made a distinction between "informal learning" and "workflow learning". Informal learning consists of the unstructured, free-flowing moments at work when we reach out to a neighbor for a question, read a blog article, Google a quick question, or share a story with a colleague on the way to the car after work. It's just "there". Workflow learning, on the other hand, is a structured and intentional approach designed to optimize performance at the moment of Apply. Workflow learning is that unique training "brace ring" that can actually save training dollars/resources while at the same time creating a return on instruction at a level the training industry has been asked to produce for as long as we've been involved.

CONCLUSION

We hope this chapter has helped workflow learning materialize for you as a more tangible and less confusing practice. Maybe we even corrected some of your own misunderstandings. Knowing what it is, what it isn't, and what potential challenges it presents goes a long way to helping you start your workflow learning journey in a smart, safe, and successful way.

CHAPTER THREE

LEARNING IN THE WORKFLOW AT THE 5 MOMENTS OF NEED

At its core, workflow learning is "learning while working at the **5 Moments of Need**". Here are those moments:

Moment	Description	Example
APPLY	When performers need to act upon what they have learned, which includes planning what they will do, remembering what they have forgotten, or adapting their performance to a unique situation	A teller is in a branch of the bank and serving customers for the first time, trying to remember and apply all that they have been taught to this point about their teller support system.
CHANGE	When performers need to learn a new way of doing something, which requires them to change skills that are deeply ingrained in their performance practices	The teller encounters a screen in the computer system that has changed from a previous version and doesn't know how to navigate.
SOLVE	When problems arise, or things break or don't work the way they were intended	The teller accidentally enters incorrect information into the computer system that could negatively impact a customer and needs to rectify the problem as quickly as possible.
NEW	When performers are learning how to do something for the first time	A bank teller is learning how to do their job for the first time.
MORE	When performers are expanding the breadth and depth of what they have learned	The teller has a basic grasp of how to perform the job, but now needs to understand more detail and nuances about each job task.

In this short video, Bob and Conrad provide a concise overview of this overarching framework.

In the sections that follow, Conrad describes how each of these 5 Moments contributes to learning in the flow of work:

LEARNING AT THE MOMENT OF APPLY

This is the most critical moment in any person's individual learning process: their moment of Apply. Preparing the workforce for this vital moment should be at the heart of all we do. This is when learners meet the realities of what they actually learned, what they didn't learn, what they have forgotten, what they have misunderstood, and any unanticipated nuances. And it occurs in the workflow, which is the most effective environment for experiential learning.

Our core mission is to develop solutions to ensure that people can perform effectively when they are called upon to act. The nature of the world today demands this of us.

Today's work environment doesn't tolerate learners stepping out of their workflow to learn unless it is absolutely vital to do so. And the actual nature of 21st century learners is resistant to learning options that are delayed and removed from the here and now. These learners are self-directed, adaptive, and collaborative in their approach to learning. They will ultimately abandon our formal training solutions if what we provide them fails to efficiently prepare them to effectively perform at their moments of Apply. Why? Because when faced with a solution that doesn't do this, today's learners will simply look elsewhere.

Responding to this need is the core calling of performance support. Its primary mission is to support people at the critical moment of Apply. The good news is that it doesn't require more effort than what most learning organizations are doing now. It does, however, require a mindset shift. It also necessitates repurposing current learning and reference assets to bring about this alignment.

We need to stop viewing people primarily as learners and view them instead as performers who may have formal learning needs. Our first response to any need for employee performance improvement must be to focus first on the moment of Apply and then wrap other learning support around the performance support solutions we develop.

Now, we're not proposing the overthrow of formal training events, but we are advocating that we move much of what we do as far into the natural workflow of the organization as possible. When we can, we should avoid pulling people from their work for long periods of learning time unless the critical impact of failure demands we do so.

We've never had greater capacity to move learning into the workflow. For example, virtual classroom technologies allow learners to synchronously gather online from where they are actually doing their work. The virtual classroom also provides the capacity to spread learning out over time so that learners, between online sessions, can act upon what they learn (Apply) in the context of their work and receive specific feedback. The virtual classroom brings instructor-led training deeper into the workflow and much closer to the moment of Apply.

The moment of Apply is the sweet spot of workflow learning. There is much that can and needs to occur here. When people are at this moment, when they need to actually perform on the job, they need instant access to resources that will intuitively help them do just that: perform. This help must be immediate and tailored to the role and situation of the performer. The aid needs to allow the performer to dive as deep as necessary, depending on their need to plan, remember, adapt, or reference the information and tools required for successful performance. Every time they do this in the adaptive environment of the workflow, they are growing in experience, thereby learning while

while working. Gloria Gery referred to this as “unconscious” learning.

In *The Sun Also Rises*, Ernest Hemingway’s character, when asked how he went bankrupt, replies, “First gradually, and then suddenly.” This will be the case for much of what we call formal learning today – unless we push our efforts more deeply into the organizational workflow and provide people the tools and preparation they need to successfully perform and learn at the moment of Apply. This must be at the heart of it all.

LEARNING AT THE MOMENT OF CHANGE

There is another moment of need that directly impacts how we address the moment of Apply. Change is a fundamental reality in today’s work environment. It is often unpredictable, absolutely unrelenting, and, more often than not, terribly unforgiving. Alvin Toffler, writer and futurist, has observed that change today is “non-linear and can go backwards, forwards, and sideways.” He further describes how we must respond to this dynamic change environment in his book Rethinking the Future:

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."

The fundamental difference between how we support learners at the moments of Change and Apply lies in the requirement that change demands of learners to “unlearn” the old way and “relearn” a new way. For the most part, our profession hasn’t provided learners the support it can and should when they face this performance twist. Here are a couple of recommendations:

Take on the Challenge of Deep-Rooted Change

Years ago, after completing work for a client, a participant in the project offered to drive me to the airport so we could continue our discussion. After a long drive I became a bit nervous about missing my flight. I interrupted our discussion and asked my driver, “How long before we arrive at the airport?” As he hit his brakes, he turned to me and said, “I’m almost home.” Has something like this ever happened to you, where you have acted in an automated way? The cognitive principle at play in such circumstances is “automaticity”. Things that we do over and over tend to become automated in our skill sets to the point that we can do them without conscious thought. And when this has occurred within a workforce and the workforce is then called upon to change that automated performance, organizations face one of the most significant performance support challenges that exist.

Unlearning a deeply ingrained skill by overriding it with a new one is the most significant learning challenge for any person or organization. This moment of need cannot be adequately met with formal training solutions alone. When organizations face any major change initiative, there is a high probability that deeply rooted skills require overriding. This can best be done with a robust, 2-click/10-second performance support solution that supports performers in their workflow, at the moment of Change, when they are called upon to unlearn and relearn. Too few change management initiatives make this crucial investment. The challenge of deep-rooted change has

been around for a long time. We now have the knowledge and wherewithal to address it directly. We simply need to understand the realities of deep-rooted change and step up to it, ahead of it, before it's upon us.

Grow Dynamic Learners

As mentioned, there is a new era of change confronting organizations today. This unpredictable, unrelenting, and unforgiving environment requires organizations to cultivate dynamic learners: those who know how to be rapid, adaptive, and collaborative in how they learn, unlearn, and relearn. Today's learners must cultivate a mindset that anticipates change and have access to tools that help them detect change before it is on top of them. Because they live in a state of continuous change, they must also cultivate personal learning strategies that minimize the probability of their own skills becoming automated (deeply rooted) unless those skills merit becoming so. These dynamic learners rely on performance support tools to assist them at every moment of learning, unlearning, and relearning. And when they see change coming, they know how to assess their current readiness to perform, identify what skills and knowledge they need to cast aside, and determine how to take advantage of performance support systems to assertively adapt to the conditions around them.

And, when it comes to workflow learning, every time performers use a Digital Coach (EPSS) to help guide them in adapting their performance, they are learning at the moment of Change while working.

LEARNING AT THE MOMENT OF SOLVE

One of the realities of life is that things don't always work the way they're supposed to. Life doesn't happen according to a script. Sometimes, in our rapid pursuit of doing what we need to do, we make the wrong turn and experience those unique learning moments called roadblocks or even failure. Today, it isn't enough to know how to do something correctly. It is also vital to be able to diagnose and solve problems. The situations we call problems can be caused by unforeseen circumstances, other people, and ourselves. Regardless of the source, these moments of Solve require diagnostic skills coupled with performance support.

The traditional organizational bandages for solving problems that arise in the workflow are help desks and sometimes intentionally created support networks, both backed by capable troubleshooters. In today's world, these models alone are insufficient for performers to solve problems that arise in their flow of work.

Competence is now a matter of individual learning agility where performers continually acquire and adapt knowledge and skills. The moments of Solve are prime contributors to the agility challenge.

Performers today must be comfortable in their ability to solve unanticipated problems.

They must have confidence in the very act of not knowing. They must be disposed to face challenges beyond their current knowledge and skills. This confidence at these critical moments will come from:

- A performance support infrastructure that has anticipated their needs at the moment of Solve.
- The training they have received to engage those tools in solving problems.
- The on-the-job successes they have along the way.
- Organizational acceptance of failed attempts that may happen in the process.

In addition, collaboration technologies provide remarkable opportunity for instantaneous access to the collective wisdom within and beyond the organization. To meet the demands of a work environment in a state of constant flux, organizations need to leverage scalable resources in the form of immediate collaboration at the moment of Solve combined with the capacity of individuals to resolve core challenges that come their way.

Whenever workflow learners use their Digital Coach to access troubleshooting resources (e.g., FAQs, lessons learned, decision trees) and guidance from others to resolve a problem, they are learning at the moment of Solve while working.

LEARNING AT THE MOMENTS OF NEW AND MORE

Most organizations have an effective existing Learn New training strategy and determining when there is a need for a Learn More strategy is generally obvious. When performers have the basics down and you want to deepen, reinforce, and/or broaden their skills, and if they have already received formal instruction in that specific area, it's pretty much a clear-cut case for a Learn More strategy. But there's more than you might think to the moment of More.

Some time ago, we worked with an amazing group of medical care professionals who had been charged with developing and implementing a traditional learning solution to help in a move to a new facility where everything had changed. There was new equipment, new technologies, and new ways of working together for more than 2,000 employees. At one point during their journey, the technology training team proposed 8 hours of live classroom training on their medical records software for 1200 of their staff. Luckily, they had wise leaders who understood that, in today's world, technology learning is usually a Learn More situation. They met this learning challenge by developing only 2 hours of classroom training and a strong performance support solution that enabled their staff to learn while they worked.

Training is seldom a pure Learn New moment because of two factors:

- Contextual understanding and experience
- Skill generalization

Suppose you rent a car in a country in which you have never driven. The steering wheel is on the opposite side from what you have experienced. The model of the car is new to you, so buttons and

knobs are in different places. Would you treat this as a Learn New situation and take a formal class? Most likely, you would respond in a Learn More mode and use your contextual understanding and experience along with skill generalization to drive that car. A job aid might prove helpful to know where various buttons are located. You might also choose to use a GPS system designed to provide some additional coaching as you drive on the opposite side of the road and approach a round-about or negotiate a turn at an intersection.

Here's the point. Most performers today have developed a contextual understanding of and experience with software and its associated technologies. Because of this, those with the disposition to do so often generalize from that knowledge and skill base to other similar technologies without needing much, if any, formal training. Even though they are in a new software package, if it looks, feels, and acts like other software they have mastered, then they are most likely in a Learn More vs. a Learn New situation. At times like this, learners generalize by just diving in and sorting it all out based upon their previous experience.

Although these generalizing learners may become frustrated because of poor software design and even more frustrated with the lack of intuitive performance support, the last thing they want to do is to spend their time and energy working through an old-school Learn New training course. They prefer an accelerated Learn More performance support approach that helps them learn while doing.

Performers need to learn in real time, on the job, at the moment of Apply.

Now, lest you decide to just leave folks alone and let them go to generalizing on their own, here's a caution. If at the moment of Learn More you fail to invest in a strong performance support system, you will end up with a haphazard approach. This leaves performers limited and inefficient in their work. It's also common for performers to generalize to inefficient habits when they "go it alone" without proper support. The solution to these generalizing challenges isn't to treat Learn More the same as Learn New. The best response is to develop a robust performance support solution and wrap around it abbreviated formal training that facilitates effective generalization from the foundational knowledge and skills

learners already have. Although these two moments of need (Learn New and Learn More) are initially satisfied by the development and delivery of formal training solutions, these two can also occur at the moment of Apply. It is highly probable that in today's work environment a performer may need to learn something for the first time or learn more right at the moment of Apply – when there simply isn't time to step away from the workflow and take a traditional course. Performers need to learn in real time, on the job, at the moment of Apply.

Every time workflow learners use a Digital Coach to guide them as they perform a task for the first time, they are learning something New. Every time workflow learners use a Digital Coach to guide them as they perform a task like other tasks they already know how to perform, they are learning More.

LEARNING WHILE WORKING

Here's how performers learn while working at the 5 Moments of Need. Suppose a performer needs to complete a job task she has never done. In her Digital Coach, within 2 clicks she begins her workflow learning experience by accessing the step-by-step instructions for the specific job task she needs to perform. She begins completing each of the steps. As she works to complete a specific step in the task, she finds she must make a decision based on the specific policy for her work area. She has no idea what that policy is, so she clicks on the policy link for that task, which takes her to the specific policy statement she needs. She makes the decision based on her interpretation of the policy and then successfully completes the remaining steps for the task. She has begun her learning journey in the workflow at the moments of Apply and Learn New (for that specific job task).

A few days later, she needs to perform that same task. She remembers how to get to the step-by-step instructions for it. She takes a quick review of the steps and begins completing the task more quickly and confidently than the first time. When she arrives at the step where she needs to make the decision, she realizes that the situation is more complex and the solution not as straightforward. She clicks on the policy link and reviews the policy, but it's still not clear what her response should be. At this moment of Solve, she clicks on the FAQ tab for that task and scans down the questions related to that specific policy. She finds a question that relates to her specific situation and finds the answer she needs to make the decision. Then, she completes the rest of the steps. She has learned in her workflow at the moments of Apply and Solve.

The following week, she finds she needs to perform the same task again. With even greater confidence, she accesses the support for it in her Digital Coach. As she arrives at the steps for the task, she sees a change note indicating that the steps are different because of a policy change. She watches a quick, 2-minute video that provides the reasons for the change. She then completes the steps that haven't changed but spends a bit more time reading through the ones that have. She also clicks on the policy and reviews the change there. She then completes the task, making her decision. She is continuing to learn in the workflow, this time at the moments of Apply and Change.

This performer is well on her way to mastering this job task, and she has done it all in the workflow with the help of a Digital Coach.

Compare this to the traditional approach to mastery learning where the goal is complete internalization of an independent skill. This takes time away from work and requires significant instructional effort. Some skills do merit this investment, but many don't. Our experience is that, on average, half of the formal training scope can be pushed safely into the workflow, where performers can learn over time while working.

Research published in the August 5th, 2011 issue of *Science* magazine by Columbia University's Dr. Betsy Sparrow is titled "Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips". In it, Dr. Sparrow explains how this research dramatically changes the way we look at learning in our organizations and the way we architect content throughout the learning process. She and her colleagues show that learners today have confidence in knowing where to find something. They intentionally learn less, thus freeing up cognitive memory for more high-level cognitive activities like critical thinking skills, creativity, and innovation. Check out this short PBS NewsHour clip for more from Dr. Sparrow:

Bottom line, our learners depend less and less on preparation training and more and more on in-the-moment-of-Apply support!

This research allows us to redefine mastery and bring significant efficiencies to the training process. Coupled with workflow learning practices, this allows us to not only change how we address mastery, but competency as well. Competence is only fully achieved when performers have integrated what they have mastered into actionable skill sets within the context of their personal workflow. This generally requires integration with other existing skill sets and with other

people via collaboration.

Workflow learning enabled by a Digital Coach can begin the skill integration process ahead of complete mastery. Because performers are actually performing work within the workflow, they are naturally integrating tasks as they gradually master them based on their day-to-day work requirements. Work can be successfully executed ahead of mastery and competency, which in turn fuel confidence and accelerate continuous improvement. What is more, competency gained through workflow learning always carries with it an ever-increasing level of experience coupled with sufficient conceptual understanding (developed with the help of a Digital Coach in the flow of work). This facilitates proper judgment and the capacity to adapt quickly to the unique challenges that occur in the workflow.

We were once asked to help a multi-national company design and implement an enterprise training solution for an ERP reengineering effort. The project involved completely changing the way they managed their financials. Every associated workflow process was redesigned to involve people on the front line of the business who had never engaged in the organization's financials before.

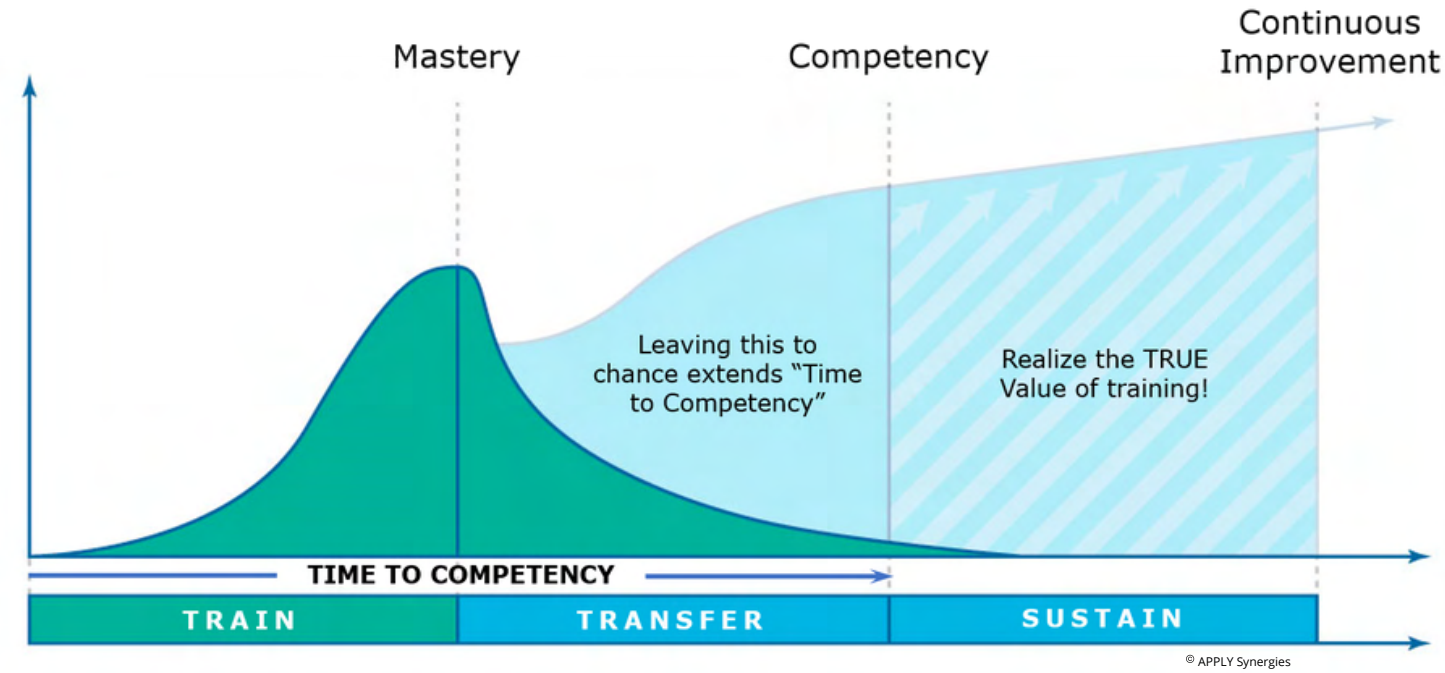
We opted to train on business processes. We linked business and non-business tasks with workflows and job roles. We developed a web-based performance support system that provided access to specific task instructions via role-based online workflow diagrams. We used the online system as the primary training resource in every class (Learn New and More). Our objective was to train everyone to use the online performance support system to help them do their jobs.

The result was that the go-live day was a non-event. We had staffed the help desk with extra support personnel, but by the end of the

first week we sent them back to their work areas because they weren't needed. The company had completely changed how several thousand people performed their jobs – without a hiccup. Why? Because workflow process was the backbone of the training effort, coupled with a web-based performance support Digital Coach that supported those processes.

Workflow process is the primary means for ensuring that performance is purposefully and effectively directed. It should be the mainstay for all training and performance support efforts and is key for any organization interested in pursuing competency beyond the mastery of independent skills.

The following figure shows the three phases for gaining and sustaining effective performance (on-the-job competence) at every changing moment.



The green area of the graphic represents the formal side of learning. Whatever a learner begins to master during a training event (whether instructor-led or elearning) will rapidly decline once the event ends. This presents a challenge to learners as they move from the formal training environment into the phase called learning transfer, which is the blue area. As the learning from the training experience rapidly diminishes, somehow learners must find their way to on-the-job competence.

The Need to Support the Transfer Stage

The transfer stage represents the effort required for performers to make their way to competent performance while on the job. This stage requires a performance support infrastructure that remediates the loss of learning and systematically supports the journey to competence. The time it takes to achieve effective performance at the moment of Apply is a critical metric for any

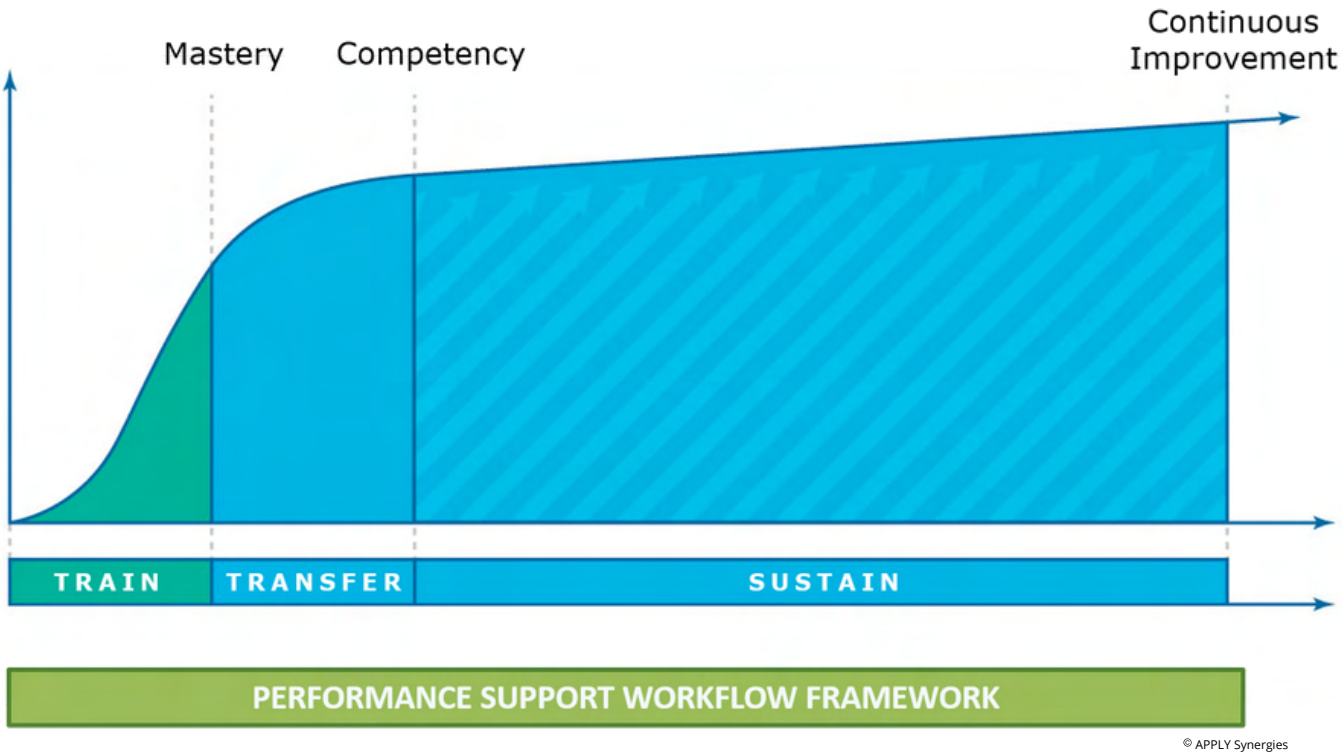
organization interested in its capacity to adapt to market opportunities, threats, and crises.

We need to move learning and performance support as far into business workflows as possible and only pull people from their work when they need to learn skills with a critical impact of failure that is significant to catastrophic. Together, these actions will cost-justify the investment in the performance support infrastructure needed to support workflow learning.

Furthermore, time to competency can be reduced dramatically by abbreviating formal learning time and collapsing the time required for transfer.

Focus on Sustain

Sustainment (see the figure below) is where the real work lies, along with the greatest opportunities. Once a performer achieves competency, that achievement can be short-lived. Change happens, and with change comes the challenge of unlearning and relearning. This is one of the primary reasons why reference-based learning (see the Betsy Sparrow research above) coupled with a Digital Coach is so vital. Organizational knowledge and employees' skills need to be up to date, and required resources need to be readily available to support optimal performance. Keeping current during the sustainment phase is absolutely vital. This requires taking steps to ensure performance support solutions are maintained.



By collapsing the time to competency and optimizing the sustainment phase, performers can devote their reclaimed time to making a meaningful contribution to their work, clients, and innovation.

CRAWL, WALK, RUN

When organizations first look at workflow learning, they immediately discover two things:

1. They have what appears to be an unlimited number of projects that workflow learning could impact.

2. They have more informal assets then they know what to do with, which are basically scattered all over the place.

This can seem overwhelming. As Bob points out, the beauty of workflow learning is that organizations can take a “crawl, walk, run” approach, which he describes here:

The initial journey into workflow learning can seem fairly daunting. It doesn't have to be! There are a few basic principles Conrad and I have learned that can make your first efforts easier than you think.

Don't "Boil the Ocean": This is a quote Con and I use throughout our workshops and one that has become one of our students’ favorites. When I was schooled in the formal side of instructional design, I was taught to create courses. Although a lesson is probably the smallest defendable "chunk" in a course, it can rarely stand alone; therefore, we think in much larger chunks. When piloting a formal training solution, we often must wait until the course is written before we dare test it on real students. To have any type of impact, these formal assets are typically fairly large. Workflow learning is quite the opposite. Since it lives at the moment of need, it can often be HIGHLY effective and have a tremendous impact when only dealing with a small amount of content. The beauty of workflow learning design is that you can take a crawl, walk, run approach, and still create a defendable solution. We often start very small in our design and build from there. Try simply addressing the top 5 help desk calls that come into your call center or ask your users to list 4 key tasks they are asked to perform but can't easily remember. These may be things they are not asked to do on a frequent basis but are key processes when needed. These types of initial solutions allow you to start small but have an immediate impact. They also help you test your framework without having to build out more than is needed. Finally, they allow your learners to become accustomed to your workflow learning tool/strategy in a manageable way.

Begin with What You Have: Most of the organizations we work with already have up to 80% of the assets they need for a highly effective workflow learning solution. They just have little to no framework to orchestrate those assets from where they are and align them to the workflow. As our understanding of this discipline has grown, it has become more and more apparent that the key to longstanding and effective workflow learning solutions is to start from where you are. This means that you don't necessarily add MORE workflow learning assets (e.g., job aids) to the mix; rather, you create an overall architecture which makes your existing assets more readily available in a "moment of need" at the job-task level in the flow of work.

BUILD AND IMPLEMENT A DIGITAL COACH

We commonly hear that an organization doesn't want to add another tool and would rather get their arms around the ones they already have. The problem isn't that workflow learning assets don't exist; it's that they simply can't be found when needed. A Digital Coach's job is to make these assets more discoverable and reusable in a simple and contextual manner. The learning portals of the 1990s are becoming the bottlenecks of the millennium. Our original belief was that if we made assets available, learners would consume them. That has not proven to be the case. We now live in a time of information overload. We have more assets than needed and have overwhelmed our learners. They don't know when, where, or how to use the many support resources available to them.

A Digital Coach's job is to not only make the assets available, but to finally make good on the infamous promise of "right asset at the right time". An effective Digital Coach needs to take that promise even further. It should also be the right amount of content. Even if I make the right PDF available to a learner, it may contain too much information. A Digital Coach should make that information available in a consumable manner. It may start out by simply showing a 5-step job aid. If those 5 steps aren't enough, it should allow the learner to dig deeper for more information, like using the PDF I just mentioned. If that still doesn't offer enough information, it may point a learner to a specific elearning module, community of practice (CoP), or subject matter expert (SME): cascading levels of guidance.

Workflow learning is not something that needs to consume a learning department or overwhelm it with more work. In fact, if done appropriately, it can make the learning assets already created that much more effective. In the long run, that can reduce the amount of formal training assets needed.

"We now live in a time of information overload. We have more assets than needed and have overwhelmed our learners. They don't know when, where, or how to use the many support resources available to them."

DESIGN FOR THE MOMENT OF APPLY FIRST

Looking a little more closely at why and how workflow learning design requires a different approach, here Bob explains why it's critical to reverse the traditional learning design model by starting at the moment of Apply and working backward:

In our industry, we spend billions of dollars annually training learners to prepare them for the moment of Apply and just a fraction of that money supporting them during it. I'm not saying that

there isn't some preparation involved, but many of the learning solutions, universities, and certification programs I have looked at – and I have looked at A LOT over my career – target preparation first and the moment of Apply second, if at all. This approach sets off a chain of events and learning deliverables that underserve our lines of business and undervalue our efforts, ultimately leaving our learners exposed to costly performance failures.

These results eventually circle back around and blame our training programs for not delivering measurable impact, which is unfair for a preparation event.

So, how do we avoid this going forward? We reverse the design model and related deliverables. We begin by designing for Apply first and backfill with preparation, or training, where needed. This is a very different way of looking at instructional design. Rather than using ADDIE and our traditional task analysis around all that a learner needs to know, the emphasis becomes what they need to DO to survive, followed by what's needed to know in the support of doing that. You may ask, "How do we make room for this type of an approach when our classrooms and elearning are already over-burdened with content?" It all starts with how you look at the need for content in the first place.

In a world of rapid change and volatility, we need to design less for knowing and more around helping learners intentionally survive and keep up when doing. We need to create performance support systems that guide and inform learners at the moment of Apply and teach them how to use these environments, as well as the fundamental things they need to know, when we have them in our training events.

Turning now to process, the transition from designing for formal instruction to designing for workflow learning isn't challenging for instructional designers with a performance-first mindset. Many of the skills and design techniques currently used naturally shift when pointed at the workflow. Task analysis, for instance, is still an important part of any design, but tasks are aligned to the workflow with a performance-first mindset (something that is often missed when learning is the primary focus).

In addition to identifying tasks, workflow learning is also about adding a layer of process. Why is process so important? Because that's the way in which your learners will encounter the need for performance support when they're back on the job. Workflow learning is not meant to be consumed

in the same manner we've designed training to be consumed. Training is a linear experience. The learner is guided throughout the process. We assume they will consume a certain section before they begin the next. We design from simple to complex. We group tasks by topics or disciplines. Much of this structure is missing in the world of workflow learning.

When a learner moves from formal instruction to workflow learning, they need information in the context of their work where the last three moments of need (Apply, Change, Solve) live. These moments are not linear. They aren't conveniently grouped by categories or chapters. They are encountered and need to be addressed in the context of the work process being experienced at the time. They need a type of "filter" that allows the learner to contextually access just what's needed at the moment of need.

Here are three examples of contextual access options for a Digital Coach:

Job role context enables a learner to access content and other related performance support assets based on their job role and responsibilities. This navigational technique is most effective when you have well-defined and understood job roles or functions within an organization. For example, below are sample roles within a service center.

As identified in this graphic, a person could quickly identify their role, which then would either display the process(es) in which they are involved or list the tasks they are required to complete. Roles or functions could also be embedded in organizations, departments, or other "who am I" identifiers that would facilitate effective and efficient access to the required information.

Workflow context in the performance support architecture allows the learner to access help based on a particular stage within a workflow. Process flows or workflow diagrams are one of the best tools to help in this area. For example, a sales representative may need to complete the following sales process to better sell to a customer.

They may be familiar with individual steps within the process but struggle because they do not understand or know how to navigate through the overarching workflow. If the process is provided within the performance support architecture, learners can better support themselves by identifying a task within a workflow, the step(s) that preceded it, and those that follow it. This will help them better comprehend how and why it is necessary to complete the current step and to facilitate the successful completion of the next step(s).

Unique identifier context is based on the specific nature of your organization and immediately recognizable by the target audience. For example, an organization may categorize information by products it sells, services it renders, or systems it uses across several workflows. The goal is to provide unique identifiers in addition to the other typical identifiers (role, workflow, and task) as another option to assist in the efficient navigation of the performance support offering. It is imperative that the performance support designer understand what, if any, unique identifiers exist and how the user will identify with them at the point of need. For example, some unique identifiers we have seen used are product types, services offered, or sales programs that would be found within or across certain roles in the organization. These unique identifiers may span multiple roles, workflows, and tasks.

ADJUST YOUR INSTRUCTIONAL DESIGN APPROACH

To effectively design for different perspectives, you need to modify your current task analysis and resulting design tasks. The current focus is on the tasks that need to be completed and the sequence in which it makes sense to teach them. This is based on categorical grouping of like tasks, prerequisite knowledge, building in complexity, and, to some degree, the preference of the designer.

The reason for modification is that users will not always access performance support in a sequential manner, nor will they have the prerequisite knowledge to perform. Another way to look at it is that performance support should not be based on how someone would learn something, but on how they identify their work context at the moment of need. This leads to a greater need for modular design that is accessible based on the user's need and orientation.

These process layers help filter the task content that follows and make performance support design more realistic and consumable when a learner migrates from formal instruction into the difficult world of application on the job.

As we've explored, worked, and reworked 5 Moments of Need learning design over the years, we've come to the following realization. Success requires a business defensible approach to instructional design: one that systematically produces sustainable, measurable solutions that enable effective performance on the job.

The transformation to workflow learning can't and won't happen until instructional design practices not only address all 5 Moments of Need, but also:

- Have systematic and repeatable practices that adhere to applied cognitive, behavioral, and experiential learning research.
- Are fast, adaptive, and iterative.
- Push as much learning as possible into the workflow, where learners learn as they do their work.
- Justify its various deliverables based upon their instructional capabilities and cost-effectiveness.

Here's what we mean by systematic and repeatable practices. We have developed a practice called Rapid Workflow Analysis (RWA). We have taught this practice to hundreds of instructional designers. When they follow the specific steps of this practice, they always end up with sets of job tasks, organized into workflow processes. These process groupings provide the foundation for other specific practices to build upon in the instructional design and development process; each with specific steps to follow that produce the same kind of results. Within this practice of RWA, instructional designers apply the principle of chunking as they group tasks into specific processes. This principle of chunking comes from applied research in managing cognitive load to optimize the capacity of the mind to store and retrieve information from long-term memory.

The need for an instructional design approach to be rapid, adaptive, and iterative is a no-brainer in today's environment; yet, achieving this is another story. Defining systematic, repeatable practices is a good start in bringing speed to the design and development process. Establishing guiding principles around these practices provides instructional designers the flexibility they need to adapt these practices when faced with unforeseen circumstances. The practice we call Critical Impact of Failure Analysis provides instructional designers the ability to develop an iteration strategy following agile project management principles.

The workflow is most certainly the best place to learn. The Critical Impact of Failure Analysis practice also helps distinguish those skills that can be safely learned in the workflow from those where the consequences of failure require pulling people away from their work to learn.

"The workflow is most certainly the best place to learn."

Any instructional design approach that fails to address all 5 Moments of Need and lacks systematic and repeatable practices is haphazard instructional design. If it is lethargic, inflexible, and cascading while failing to reach into the workflow, and if it lacks the means for justifying its delivery and management modalities, it's not defensible outside of academia. Our organizations deserve better. Our profession deserves better. We need to be willing to challenge and focus our methodology on the performance needs of an organization's workforce.

Over the past 35 years, we have worked to adjust traditional instructional design methodology to address the performance requirements for organizational learning. The result is the **EnABLE**

instructional design methodology. It is a blend of applied learning theory and practices from both Experiential and Cognitive/Behavioral research. It embraces and honors the foundations of ADDIE but addresses the broader performance-focused requirements of organizational learning. Its solutions extend into the workflow and address all 5 Moments of Need.

The development of the EnABLE methodology began in 1984. The tactical practices undergirding it have been developed and honed in the real world of organizational learning.

We have worked with many hundreds of gifted instructional designers developing and implementing solutions that included every aspect of the delivery and management of every type of learning. Audiences were chronologically, culturally, linguistically, and logistically diverse. Settings ranged from small to large international corporations, universities, school districts, government agencies, and religious organizations.

This work has helped us adjust ADDIE into a systematic, agile, performance-focused instructional design methodology. There is nothing else like it. EnABLE addresses all 5 Moments of Need. It provides tactical guidance for safely extending learning into the workflow. It directly addresses the challenges and needs of organizational learning in today's world of unrelenting change, where organizational success is fundamentally determined by how well people perform their daily work.

Given the current work climate, you might be wondering how virtual learning fits into all of this. Today, especially because of the pandemic, more learning is virtual than ever before. Thankfully, we have a blended model for successful virtual workflow learning – **GEAR** – that we have operationalized again and again with remarkable success.

G: Gather. This is what learning has traditionally pivoted on. We've always gotten people together in classrooms, and now we gather virtually. One to two and a half hours is the average amount of time people can cognitively handle in a virtual setting, depending on the complexity of the content. Remember, you do not need to, nor should you, teach everything. Don't chop up a traditional 8-hour class into 8 hour-long virtual sessions. You can probably do 4 hours of an 8-hour class in smaller chunks because you have the Digital Coach to help during the workflow. So, Gather is saved for what we call the most critical skills that an instructor must be sure are taught, practiced, and communicated. Gather initiates the learning process. It doesn't close it.

E: Expand. The Expand activities live in the workflow and are intended to provide access to resources that allow people to deepen their understanding of what they need to know. They also help people translate what they've learned in the Gather session and what they need to be able to do in their own work environment. It's a deepening and expansion of knowledge and adapting that to their world.

A: Apply. This is where, in the workflow, learners apply what they have learned and what they have picked up in their Expand activities to the real world of their work – in meaningful chunks and in meaningful groups of activities that will further their skill development. All of that is supported by the Digital Coach. An important aspect of Apply is that it goes beyond Gather. We said earlier we only cover critical skills in Gather. In the Apply activities – and when you wrap real-life scenarios around those – the less critical skills are going to be needed, learned, and discovered.

R: Receive Feedback. In final analysis, we once again Gather learners in virtual groups, coming full circle. We let them review their work. They turn it in and and we give them feedback via rubrics. In the end, this is where the real learning happens. Here, they get to talk about what they did in Apply, which is the application of true learning. They get great feedback, positive and otherwise, and they get to learn from each other. The pilot group for GEAR said unanimously that of the four letters – G, E, A, R – R was by far the most popular, because that's where the most learning occurred, followed closely by Apply. The least popular part was Gather. The learners knew it was important and that they had to do it, but it's interesting that the least impactful part is what our industry tends to think of as virtual instruction.

GEAR is a very powerful, blended, virtual, and workflow learning model, one that we know serves organizations well.

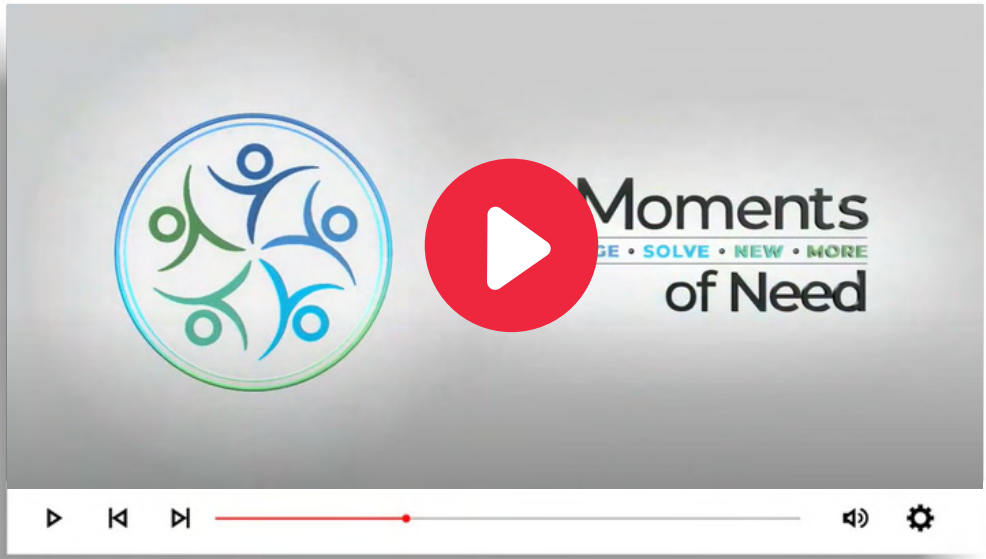
CONCLUSION

The 5 Moments of Need framework provides the simple, practical, critical bedrock on which to build your workflow learning strategy. Hopefully, you have a clearer more holistic picture of each moment and how workflow learning enables learners to be successful in each one.

CHAPTER FOUR

MEASURABLE IMPACT OF THE 5 MOMENTS OF NEED

For most learning professionals, measuring the impact of learning solutions is an insurmountable hurdle, one that requires more time and resources than any L&D function can spare. It's not scalable, it takes too long, and few learning organizations even know where to start. Enter workflow learning! Here is a short clip where Bob introduces the power of workflow learning in enabling true, measurable results:



In this chapter, we'll dig into how organizations can finally measure the organizational impact of workflow learning as part of their 5 Moments of Need strategy.

WHY & HOW THE IMPACT OF WORKFLOW LEARNING IS MEASURABLE

Workflow learning is a game changer when it comes to measurement. Here, Bob explores how workflow learning and its associated performance support capabilities are key to overcoming the measurement challenge:

For as long as I've been in training, we have been debating its efficacy. We have struggled long and hard to link measurable business results to learners who attend some type of formal instruction – in class or online. Why has this been so hard? Why do so many still find this exercise exhausting, expensive, and often inconclusive at a meaningful level?

Maybe the problem lies in the original goal? Maybe the correlation between a training event and improved business outcomes is fundamentally flawed? Is the jump between mastering content and being able to apply that content in an effective and productive way just too great? I would argue that we've gotten this wrong from the start, and without venturing into the workflow learning arena, training will continue to have a difficult if not impossible time tying itself to true, measurable results.

Let's take a closer look at the learning journey to better understand where this might lead. Classroom training and other formal training "events", including many elearning models, are all too often about knowledge gain and transfer (which is a wonderful and necessary thing!), but this is short-sighted. Even though people can't become productive without first having a fundamental understanding of what they are being tasked with doing, we mustn't stop here. We must take the learning experience all the way to true business impact.

The journey to measurable results is divided into two parts:

- **Mastery:** A learner's ability to demonstrate gained knowledge and/or the ability to perform a task outside the flow of work.

- **Competency:** A learner's ability to effectively apply and integrate what they've learned into their work environment.

Training has typically stopped at mastery and not ventured as deeply as it should into developing competent job performance. This is where workflow learning and the design of performance support deliver their real value! Training without performance support will never successfully sustain learners in the last 3 moments of need (Apply, Change, Solve) where measurable outcomes really happen!

When we venture into competency with the full range of performance support practices now available to us (its tools, strategies, and frameworks that complement training), we can begin to measure our direct impact on:

- Productivity
- Profitability
- Operational risk
- Employee engagement
- Organizational mission and values

Measurable outcomes manifest themselves in the workflow and on the job. Until training departments design, deliver, and maintain learning strategies across the entire journey from mastery to competency, the hunt for ROI will remain a frustrating and often futile exercise.

Furthermore, improving results begins with improving worker performance, which training alone cannot materially impact and sustain. Not only do we need to train workers, but we also need to support them in the workflow.

One of the primary benefits of embedding a performance support solution into the workflow is the ongoing measurement capability it provides an organization. An Electronic Performance Support System (EPSS) is designed specifically to support on-the-job performance. When people choose to use that EPSS to help them perform their work, their usage patterns provide vital data points that can be directly associated with business impact measures. Plus, gathering this type of objective data can offset rumors and anecdotal discussions about the value of adding performance support and training in general.

This direct connection to the actual work is what we have been missing in our past measurement efforts. An EPSS bridges that gap between training and on-the-job performance. Measuring worker results at the actual point of performance gives us the data we need to demonstrate measurable impact and results. Organizations we work with have gathered some striking data linking performance support solutions to improved worker performance, therefore driving business outcomes and results. For example, a global manufacturing company implemented an EPSS at one of their plants with the following impact:

MEASURED METRICS	POST-SOLUTION IMPLEMENTATION
Product Changeover: Liquid	5% improvement in 12 months
Product Changeover: Size	20% improvement in 4 months
Operating Efficiency	3% increase from baseline
Asset Utilization	4% increase from baseline
Unplanned Downtime	8% reduction from baseline

Behind these number shifts are performers doing their work more effectively and efficiently. The result for operating efficiency alone was increased production of more than 1.5 million bottles per year.

Those are some powerful data points, and they bring us to the all-important issue of choosing what to measure to show impact.

Here, Conrad explores this challenge and provides examples of how learning organizations can link learning to business impact by making performance visible to the organization, leveraging the embeddedness of an EPSS, and by focusing on impact metrics:

Because of the distance between traditional learning and performance, we've rightly struggled to connect our learning efforts with business results. The great news is that an EPSS provides us that linkage we need to finally connect the dots.

Measuring business impact, beyond just financial benefit, begins with measuring the right things! For us to demonstrate measurable results, we need to understand and then prove the connection between what we provide and its impact on the business. Only when an organization has an EPSS in place is there any hope of reasonably making these connections.

The most logical way to connect what we do to business outcomes is to connect learning to employee performance on the job via an EPSS. This requires clear visibility of the tactical work that performers actually do in their flow of work. This job task visibility can't be overlooked or ignored. The first thing we do in any workflow project is "map" that workflow by identifying all the job tasks associated with a specific flow of work and organize those tasks into workflow processes. With this done, we can develop a targeted training experience and performance support solution that can connect what we have done to business impact, and to actual financial/strategic benefit. It's basically turning Kirkpatrick's model on its side.

For example, suppose an organization develops a streamlined process for producing widgets in response to an increasing demand for those widgets. A training course is developed. By monitoring adherence to process through performance support usage data, workers produce more widgets (business impact), which then increases profit margins because the number of workers needed to produce that widget remains constant while revenue rises by meeting the increased demand (financial benefit). As a result, the company increases its market share (strategic benefit).

Here's another example. An organization implements Salesforce as its CRM; it also implements an EPSS within Salesforce, which provides contextual support to the sales team and ties Salesforce to the other software applications, non-system sales tasks, and tools needed to effectively follow the company's overarching sales process. Sales teams are trained on Salesforce, the other applications, and how to use other sales tools, such as completing a Targeted Account Plan spreadsheet. During their training they use an integrated EPSS that provides guidance from wherever a salesperson is in

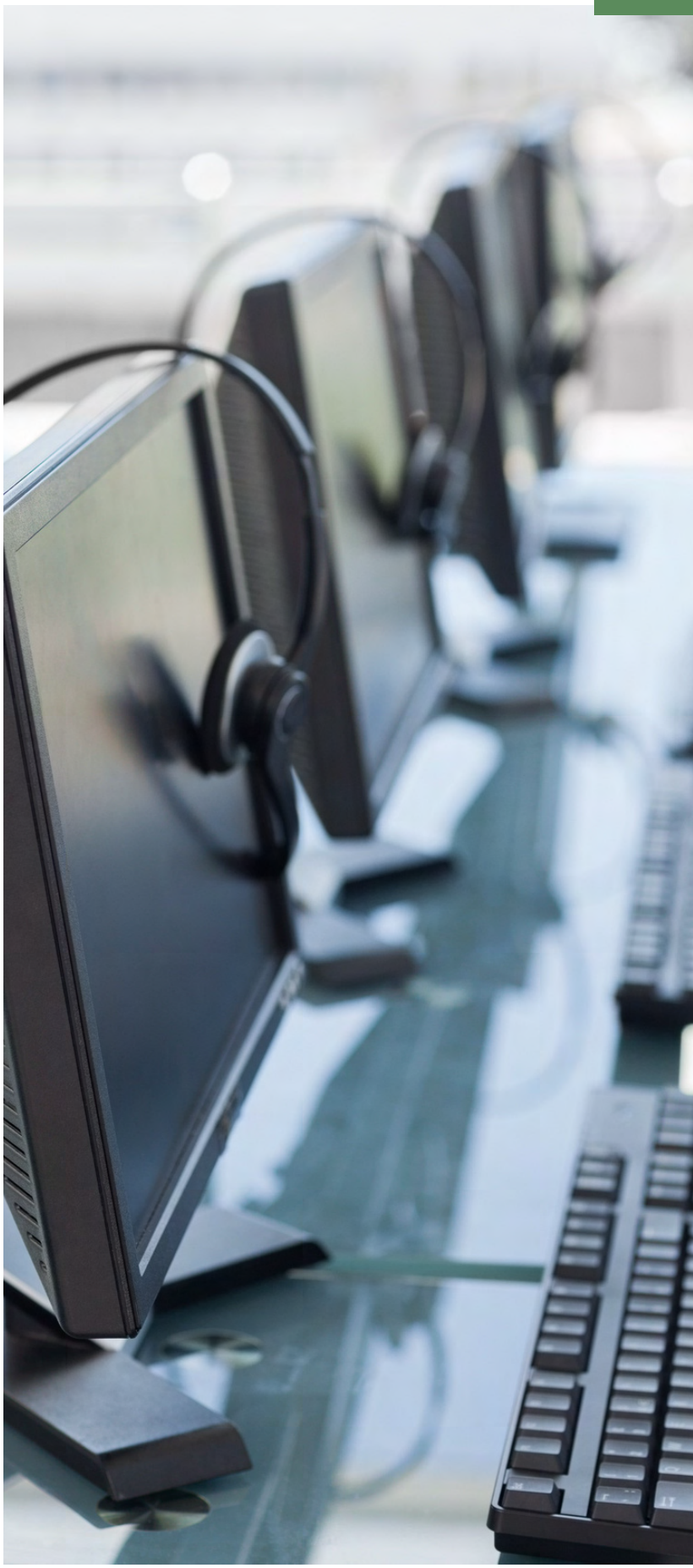
the process - within any of the applications, when using any of the tools, or simply following the specific steps for prospecting a customer (training).

On the job, the sales team works within the EPSS to help them access the tasks and resources needed to help them work as a team throughout the sales process. Independent of where they are, they have access to what they need within 2 clicks/10 seconds via their phone, iPad, desktop, and, in some instances, even print (performance support).

The EPSS's monitoring capability shows those members of the sales team who are adhering to the process and working effectively within the applications and have therefore increased their respective pipelines on the average by 28% (business impact).

The following quarter, individual and collective financial targets are met (financial impact), which in turn increases the market value of the organization (business impact).

Linking training to business impact has always been a challenge. Without performance support, there is limited capacity to do this. With performance support, we can move beyond gathering the usual training metrics (pass/fail rates, number of student days, percentage of course completions, smile sheets, etc.) and on to those directly tied to business impact and financial/strategic benefit. It is the EPSS that allows us to monitor adherence to process, verify successful performance, and tie it all to improvements in actual work performance (reduced error rates, reduced process time, etc.). What is more, we can correlate what each worker's improvements actually mean to the business (faster, better, cheaper) and turn that into hard dollar numbers with which the business will resonate and trust.



There are 5 areas of business impact that an EPSS can help measure.

Gathering measurement data for these types of outcomes requires a performance support infrastructure with at least one fully functioning EPSS, which must be properly designed to facilitate this measurement. In addition, the technology behind the EPSS must allow two key functions:

- Targeted usage monitoring
- Spot verification via micro-polling

TARGETED USAGE MONITORING

A fundamental reality of performance support is that people will choose whether to use it. That choice is based on how helpful the performance support solution is at the moment of need. If it's helpful, performers will return. If not, they abandon ship quickly and are reluctant, if not resistant, to return. For example, if a performer accesses the steps of a specific task multiple times, you can confidently know that those steps are proving helpful. In addition, whenever a performer demonstrates a pattern of accessing a specific resource associated with that task, you can also confidently assume the resource is proving helpful. By targeting specific tasks and the types of resources associated with those tasks, usage monitoring can provide a valuable ongoing data stream to help determine business impact.

SPOT VERIFICATION VIA MICRO-POLLING

In the realm of workflow performance, job tasks aren't all equal when it comes to the consequences of failure. They are all important to the success of the work, but some have significant to catastrophic impact if performers fail to successfully complete them. These "high impact of failure" tasks and their associated resources merit periodic (spot) verification of successful completion as a second data point along with consistent usage. This spot verification can be accomplished via micro-polling. Obviously, this needs to be done purposefully with restraint, but this verification adds credibility to usage data and provides expanded capacity to measure business impact.

HOW USAGE AND SPOT VERIFICATION WORK TOGETHER

One of the five key areas for business impact, shown in the previous figure, is increasing profitability. Here's how an organization can go about gathering specific measures on this area via an EPSS:

Measuring Reduced Time to Changed Performance

Suppose a moment of Change occurs that requires a performer to unlearn and relearn a task using the EPSS for guidance. The beginning of the moment of Change is time stamped by the occurrence of a change in content in the EPSS. The end time is also stamped when the performer successfully completes the task. Multiple visits to the same task-level support, then, strongly suggests successful performance over time. This can rightly be interpreted as "changed performance" or "proficiency". You can also include spot checks to verify successful performance by micro-polling performers.

Specifically, then, to measure reduced time to changed performance, you would do the following:

- Push notification of the change(s) with a brief description of and direct links to those places in the EPSS that would help performers navigate the changed performance.
- Track usage patterns for all changed tasks and their associated resources that would influence successful performance.
- Confirm via micro-polling successful performance of tasks with changes (especially where the impact of failure is significant to catastrophic) via micro-polling.

Measuring Reduced Time Spent Supporting Others

When employees are engaged in self-support or peer support, they aren't performing the work that furthers the mission and success of the organization – and the work for which they are being paid. The purpose of an EPSS is to be a digital coach and provide 2-click/10-second access to just what's needed when it's needed to successfully perform work. As such, EPSSs are specifically designed to reduce support costs in this area.

The cost of self-support includes the amount of time performers take to solve a problem, figure out how to perform a task, find resources needed to help execute the work, or make a decision. Once an organization has baseline data regarding the amount of time employees spend figuring out how to do things, finding resources to do their jobs, and solving problems when things go wrong, it can

begin to track EPSS usage patterns. These can be correlated with the baseline data to substantiate reduced self-support costs. Usage patterns to consider are:

- Revisits to a task area and to its specific resources.
- The types of resources accessed.
- The amount of time performers spend in a given task area working with those specific resources.

These patterns provide data points that can help draw reliable conclusions regarding time savings when compared against the baseline data. For example, monitoring resource access times and comparing that to baseline time required to find resources without an EPSS can generate helpful support cost reduction data.

Measuring Reduction of Work Stoppage to Learn

Work stoppage costs organizations. One of the fundamental costs of formal learning is that learners must stop working to participate. The time required to adapt what is learned to the workflow also costs. When things go wrong and learners stop work to solve the problem, more productivity is lost, which costs even more.

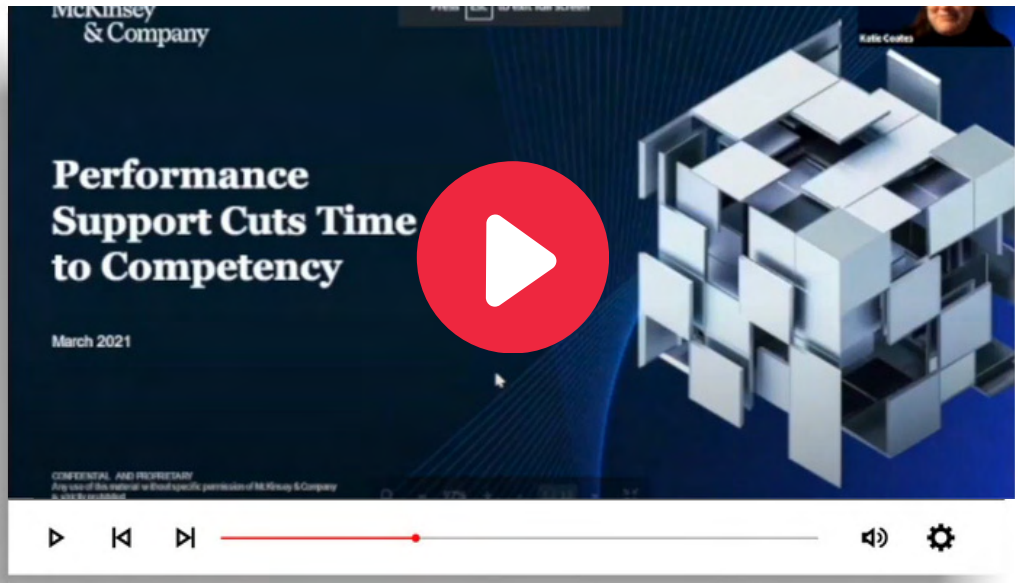
An EPSS allows organizations to safely push, on the average, half of the learning requirements completely into the workflow where performers learn while they perform their work. This reduces work stoppage to learn. In addition, an EPSS can dramatically reduce the time it takes to achieve effective performance in the workflow. And, as mentioned, at the moment of Solve, an EPSS can reduce work stoppage by providing 2-click/10-second access to just what's needed to solve the problem. Reduced work stoppage alone can pay for the investment in building and maintaining an EPSS.

"One of the fundamental costs of formal learning is that learners must stop working to participate."

These are just three examples, but targeted usage monitoring and spot verification via micro-polling can provide similar measurement support for the additional criteria. As more organizations mature in their EPSS production capacity, they will be more prepared and able to pursue these and many other measurement capabilities.

EXAMPLE OF AN ORGANIZATION DEMONSTRATING THE IMPACT OF WORKFLOW LEARNING

Prominent global consulting firm McKinsey & Company was able to leverage a workflow learning approach to restructure one of its onboarding programs and cut time to competency by over 50%. In this 15-minute video, McKinsey's Katie Coates shares how her team was able to restructure new hires' classroom experience, implement a digital coach, and see significant impact when comparing metrics from the previous and current versions of onboarding. This success has led to new workflow learning projects for different McKinsey audiences.



CONCLUSION

We hope you can see that organizations embracing workflow learning can aggressively broaden the definition of business impact to be a measure of the strategic and financial benefits of their learning and performance support efforts, including reduced time to competency, increased productivity, and KPI achievement (that inherently drives profitability). We think these are the most important metrics you could ever prove. As we've said many times already, the sweet spot for workflow learning is effective worker performance. This is where we as learning professionals can really impact the bottom line, and this is what will make your executives stand up and take notice!

CHAPTER FIVE

REQUIREMENTS FOR IMPLEMENTING A 5 MOMENTS OF NEED FRAMEWORK

With all that we've shared about the 5 Moments of Need, you might be thinking, "This all sounds great, but how do I get started and what is actually required?" In this chapter, we'll introduce a maturity model as a means to understand where you are in your 5 Moments of Need journey so that you can identify where you want to go and how you can best get there. We'll address the need to shift to a "performance-first" mindset and share practical guidance for how to start with the right project, "ingredients", and people. We'll also provide more detail around how an EPSS works and the value it delivers. Finally, we'll explore how various elements (e.g., change management, SMEs/BMEs, content management, etc.) play essential roles in effective workflow learning strategies.

KNOW WHERE YOU ARE & WHERE YOU ARE GOING

Conrad said in a podcast with Bob, "If we don't know where we are, and we don't know where we are going, how in heavens name will we ever get to where we need to be?" Click on the play button to the right to access the complete podcast.

He goes on to explain why a maturity model is needed: it's a map, so to speak, that helps us see where we are and also chart a course of where we need to be based on the unique circumstances of an organization. The maturity model provides the means for getting to where we need to be, starting first with an understanding of where we are.

Our team at APPLY has developed a maturity model for this exact purpose. It is not something we created out of thin air. There is a lot of rich history behind it (it started as far back as 2012 when we created our first Organizational Learning and Performance Capability Analysis). This early model had 25 detailed scales across the following five areas:

Category	Marginal 1 2 Stable 3 4	Complete/ Transformational 5
Strategic Alignment	→	An integrated Performance Support Strategy delivering strategic value to the organization
Performance Support Strategy	→	Rapid, adaptive practices governed by sound methodology and an overarching framework
Leadership	→	Leadership practices that encourage and sustain high performance in an ever-changing business environment
Technology	→	The technology infrastructure required for supporting performance across the 5 Moments of Need
People	→	Dynamic Learners who are rapid, adaptive, collaborative and fully engaged

In January of 2020, through the good work of our team, especially Carol and Doug Stroud, we could see the need for a more in-depth maturity model. We took a hard look at the rich data that we had gathered over two years of benchmarking work focusing on the 5 Moments of Need framework and its broader role that learning and performance support can and should play in organizations. This of course includes workflow learning. With significant effort, we created a comprehensive approach for determining where an organization is and needs to be to adapt, learn, and perform at the speed of change. We have identified 4 stages of this journey:

Level 1 is where many organizations are today: in the traditional training model. They are unfamiliar with the approach and are mired in a "training-first" mindset. Wherever organizations are, they can use the maturity model to chart their path for getting to the level that makes best sense for them. In fact, the maturity model, in concert with some very powerful change management tools, can help organizations determine the most efficient path forward to get where they want to go. In another podcast titled "Why Maturity Models Matter," Bob, Conrad, and Sr. Business Analyst Carol Stroud explore this even further. Click on the play button to the right to access the complete podcast.

SHIFT TO A PERFORMANCE-FIRST MINDSET

How narrowly does your learning and development group view its role? Here's a chance to check by selecting which side of the line best describes how your team views the work you do.

Training *Mindset*	Performance *Mindset*
We see training as the primary means for achieving effective on-the-job performance.	We see training as just one of the means for achieving effective on-the-job performance.
Our primary focus is developing learning solutions.	Our primary focus is developing performance solutions.
Training is our default solution when there is a performance gap.	By default, we check to see if effective performance can be achieved without pulling people away from their work.
We view our work through the lens of designing, producing, and implementing courseware that is aligned with business needs.	We view our work through the lens of designing, producing, and implementing solutions that drive effective performance at every changing moment.

If your team is already fully on the right side of the line, congratulations. If your team is anywhere on the left side of the line, there's important work to be done. Here are some recommendations to help you make the shift:

1. Challenge the belief that the strength of classroom instruction alone can get learners to the levels of competency they need to perform successfully on the job over time.

The learning team needs to fully embrace the reality that no matter how effective their classroom instruction is, it isn't enough. Not all learners pay attention. Some fail to learn all that is presented in their formal learning experience. They sometimes misunderstand, and what they do learn they

readily forget unless it is immediately reinforced in their workflow. In addition, when learners attempt to apply what they did learn in the classroom, they meet unanticipated nuances, and the challenge of a constantly changing performance landscape.

This is where the 5 Moments of Need can be helpful, as can a discussion around the three stages of learning: Train, Transfer, and Sustain.

2. Make the case for offloading training requirements from direct classroom instruction to a performance support architecture.

The learning team also needs to be willing to offload training requirements, where they can, to an integrated performance support architecture. “Critical Impact of Failure Analysis” is a practice that identifies those elements of training that can potentially be treated less intensively during the classroom instruction along with some skills that might be safely offloaded entirely to a robust performance support system. This offloading of training requirements, where there is little to no critical impact of failure, allows greater instructional focus on those skills where there is significant impact of failure.

3. Flip the classroom from a “learn it all here” environment to a “learn how to learn” environment.

Assuming there is a strong performance support architecture in place, learning can be extended beyond the classroom. The classroom can become an environment where learning is initiated, critical skills are addressed, other skills are introduced, and learners learn how to use the performance support architecture to continue that learning beyond their classroom experience.

4. Develop a “Proof of Concept” to prove that performance support can do the job.

The only way a learning team can, in good conscience, support this mindset shift from event-based learning outside the workflow to process-based learning that extends deeply into the workflow is if they can be convinced that a performance support architecture is robust enough to take on the responsibility of sustaining learning in the workflow.

You can go a great distance in accomplishing this by developing a “Proof of Concept” (PoC). This doesn’t require significant investment. Here’s how you do it:

- Identify a meaningful project where an EPSS could prove helpful to the business. (See the next section about “starting with the right project”.)
- Find someone who has built and successfully implemented an EPSS that functions in the way you determine would be most helpful for this project.
- Rely on that expertise to guide you in developing an EPSS functional shell with just enough content in it to demonstrate how the EPSS would work for the project and stand as a model

of how others like it could deliver business value.

All we do must optimally lead to effective workplace performance. It can often include training, but training isn't the endgame. It's one of the many means we can employ to enable peak performance. This is the mindset we need to cultivate in ourselves and in others.

When our colleague Beth Daniel was a learning leader at a very large banking organization, her first project was small and addressed an area of performance within her own L&D team. She wanted her team members' buy-in, so she rapidly produced an EPSS for them. She built the EPSS using SharePoint, knowing that it was not a full-blown EPSS authoring environment, but she wanted to do something fast to meet their immediate needs. With her team's resulting buy-in, they then took on a larger project outside L&D using an EPSS authoring platform for a PoC so their key stakeholder and her team could see the full functionality of an EPSS. This resulted in cost justification for purchasing an EPSS authoring platform and buy-in from more than a hundred instructional designers. As they expanded their EPSS development capabilities, they ended up employing both SharePoint and their EPSS authoring system, depending upon the scope and circumstances of the project.

START WITH THE RIGHT PROJECT

It's important to start reasonably small and build on initial success, so we'd like to share some criteria and guidance that we've offered many organizations as they begin their foray into workflow learning. Here, Bob lays out 5 critical decision criteria to help prioritize those first projects:

Where to start and how to gain traction? It's all in that first project. Seeing is believing! Con and I have given thousands of presentations on "What are the 5 Moments of Need and workflow learning?" to every level of the enterprise. Even with the best of efforts, nothing beats seeing it in action to win over an organization and send the 5 Moments of Need into the mainstream. The most successful organizations we've worked with are the ones who have introduced the 5 Moments and workflow learning in a strategic and intentional way. Now, that's not to say that the project was "strategic"; rather, the approach used by the learning group was! It can sometimes start in the most unsuspecting way with what appears to be a "small and under-the-radar" project. Here are criteria we've used when coaching organizations through selecting that first project:

The 5 Critical Decision Criteria When Prioritizing Your Performance Support Project:

1. Audience: It's key to understand the learners and/or department you are about to support. We recommend you select a department that you work with frequently and one you already have a strong relationship with, especially its leadership. Are they risk takers? Are they flexible if the project doesn't go exactly as planned? Will they provide access to the learners in the workflow so you can train them on the workflow learning tool/approach appropriately? Will you have access to them throughout the rollout to gauge success? These are key characteristics of your first audience. Then, take your testimonials and metrics with you as you begin to build momentum.

2. Scope of the Project: When you're just starting out, you want to be careful of selecting a project with too large of a scope. Many will be watching. You want this project to be tightly defined with achievable goals and measurable success criteria. You also want the criteria to be something the lines of business (not just L&D) care about. Again, limiting the scope of your first project will allow you to gain some momentum for broader follow-on projects. For now, keep it in control.

3. Amount of Existing Content: Workflow learning is at its best when it leverages existing learning assets/content, especially bringing to life resources that are rarely used or hard to find. Your department will also have enough to juggle without being charged with creating a lot of new content. The more you can broker, the better. For the first project, the more you can focus on design and the brokering architecture, the better. If you can work with existing content, you can take some of the development off your plate. It also makes blending easier since the existing content will typically have a credible and well-established training program already in place.

4. Timing: The release of the program can be critical to its success and sustainability. The perfect window is between 3-6 months. You don't want to put undue pressure on yourself by setting unrealistic milestones on your first project. At the same time, you don't want it to be over-engineered and take 8-12 months to be released. Another part of timing relates to budgets and your project's proximity to other key initiatives within the organization. As was mentioned in the second criteria, the proper scope of the project is a key balance to strike. You don't want it to be a major splash or a possible belly flop, but at the same time, you don't want the results to go unnoticed if it's pitted against another major initiative. So, pick something manageable both in size and timeframe.

5. Business Context: Finally, one of the most important elements of a successful 5 Moments of Need project is identifying the context. Context has two meanings here. The first is the degree to which the content you've picked has a business context. That may sound strange, but many content areas we're asked to design for have a poor business context, meaning they haven't yet been introduced or integrated. It is ideal for your first project to have a pre-existing business context and workflow. Second, will the EPSS you develop be contextual? Some of the most common and successful first projects are IT related. In this case, you will need to be sure that the technology has ways of integrating your content. Do you have a strong relationship with the IT department on this project so you can get their help when integrating? Does the audience have a strong technology aptitude so they can handle the integration? Is technology a commonly used method of support?

These criteria have gone a long way in helping us build not only successful first projects, but sustainable and long-lasting workflow learning strategies, which should be the goal of any performance support rollout.

"All we do must optimally lead to effective workplace performance. It can often include training, but training isn't the endgame."

INCORPORATE THESE KEY PRINCIPLES IN YOUR 5 MOMENTS OF NEED STRATEGY

Additionally, there are some key "ingredients" that contribute to the success of any 5 Moments of Need strategy rollout:

Embed in the Workflow

The more the 5 moments of Need strategy and related software are embedded in the workflow, and moved closer to the problem they are solving, the higher the probability of adoption and impact. Proximity is EVERYTHING! Clicking out to an LMS or a repository to search through thousands of resources is not embedded. As you know by now, Con and I have a mantra: "2 clicks or 10 seconds". If the learner can't get to the support they need that quickly, they simply don't engage.

Provide Contextual Access Based on Job Role, Workflow Process, or Circumstance

This principle is often confused with the embedded principle. Just because something is accessible doesn't mean that the content presented will be useful. The content needs to be relevant to the learner's role, workflow, or problem being solved. Imagine facing a critical decision and having 5 minutes to make it. You are given access to hundreds of potential documents, websites, and colleagues as resources. How do you feel right now? The more your workflow learning framework can contextualize the resources, which are made available based on the circumstance you find yourself in, the higher the probability of success!

Provide "Just Enough" Content

This is one of the most misunderstood principles of effective workflow learning, and many of its solutions simply offer too many options. This is not a strategy of abundance: it's a strategy of specificity. More is NOT better when it comes to workflow learning design. Effective workflow learning offers just the right amount of support, with the most appropriate learning/support asset(s), and then guides the learner to more, if needed. You've seen us refer to this as the "Performance Support Design Pyramid". Repositories like SharePoint and others struggle with mapping to this type of content architecture and being maintained over time, especially when mapping across multiple workflow processes, job roles, and systems.

Integrate with Formal Learning

The most successful 5 Moments of Need solutions we've been involved in start in the classroom, or the formal domain. Rather than teach everything like we once did, the trainer only teaches the most critical skills and then uses the rest of class time to help learners understand how to stand self-reliant by using workflow learning. Clearly, repositories can be integrated into training. The problem is that many of those sites hold a lot more information than the content a specific training course typically focuses on. This breaks the rule of "providing just enough content" as outlined above. A specific area of a repository can be deep linked, or brokered, from within a workflow learning framework to optimize the content stored in the repository while not overwhelming or confusing the learner in the process.

Keep Content Trustworthy

The number one killer of workflow learning is incorrect or outdated content. Since workflow learning is consumed at the moment of performing a task, if this doesn't help or produces an incorrect outcome, learners will never use it again. Some type of maintenance strategy must accompany every workflow learning rollout. Unfortunately, many repositories have not been set up with this type of rigorous approach to maintenance. They end up being the dumping ground of multiple versions of the same content found in multiple places. Using workflow learning authoring software can help bring semblance to this issue, allowing for versioning and tracking in a way that repositories aren't able to support. Also, rarely have we found all the appropriate learning and support assets stored in one place. There are often other web links, elearning, and additional resources that could be used in the workflow learning framework. These need to be made available and maintained in concert with what's available in the repository.

"More is NOT better when it comes to workflow learning design."

ENGAGE TRAINERS

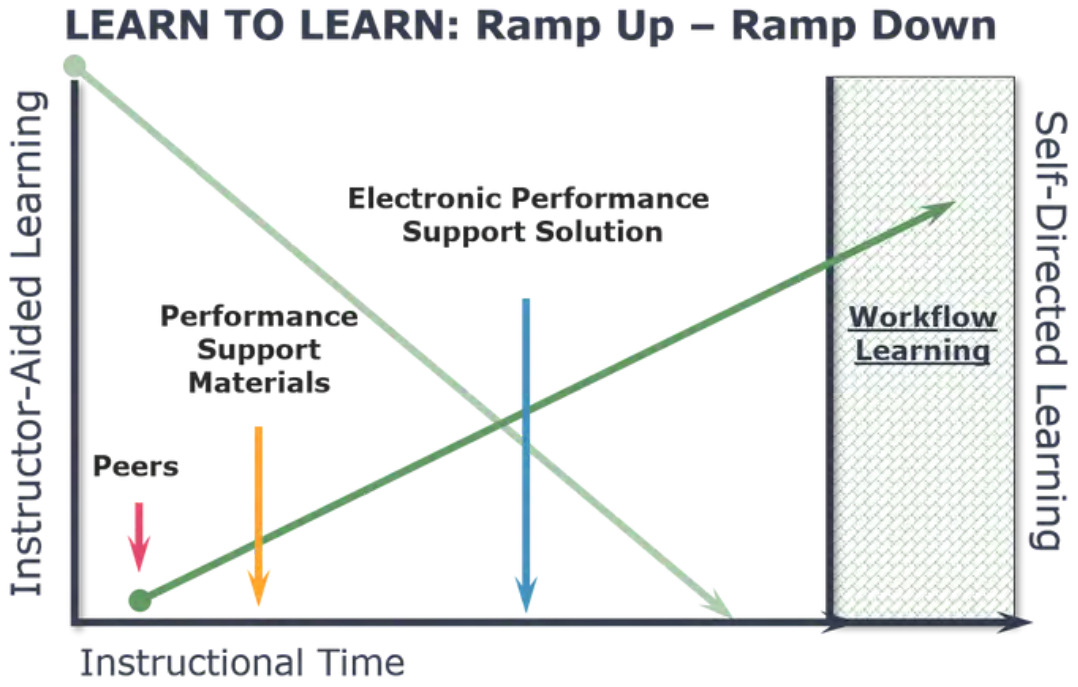
When it comes to introducing 5 Moments of Need efforts, we have found that the most successful initiatives begin in the classroom and are introduced in the context of formal learning. Buy-in and support from the trainer is critical to this success and involves considering a few important factors:

Involve the Trainer Early in the Development Process: Once you begin introducing the 5 Moments of Need into the mix, trainers need to be involved as early as possible so they can understand the intended outcome, design, and presentation. If they feel that this has been thrust upon them, many will not engage. We have even seen trainers disrupt a 5 Moments of Need rollout because they felt removed from the process. Many trainers see the shift to workflow learning as a threat and as a tool designed to lessen their role. Again, not true! In fact, a trainer is key to making workflow learning successful.

Help Your Trainers See Their Role Differently: Integrating workflow learning into a classroom involves more than just "demoing the workflow learning tools at the end of class". For these tools to be truly internalized and seen as valuable, the trainer needs to position them as an integral part of the classroom experience. They need to be seen as what will truly help the learner in the context of their job, and as tools that the trainer believes in! To make this work the trainer will need to teach a different level of skills than the ones they may have typically focused on. Enabling workflow learning is not about learning a particular rote piece of material; rather, it is about the critical thinking skills needed to effectively problem solve and use workflow learning tools in the context of doing one's job. This will be a different way of approaching instruction. It begins with simply not answering as many questions and guiding the students toward the solution through the workflow learning tools being introduced.

The “industry term” for this type of learning strategy is “metacognition” or learning how to learn. It involves teaching a learner about when and where to use particular strategies for learning or problem solving. This is workflow learning’s greatest strength. The trainers who have mastered this technique are teaching at a level above all others. Workflow learning tools enable this to happen.

Teach the “Ramp Up/Ramp Down” Technique: As mentioned in earlier chapters, this is an approach where the instructor intentionally eases themself out of the “support” business while replacing it with equally effective workflow learning strategies. As the graphic shown below illustrates, as the trainer’s level of support lessens over time, they replace that support with 3 workflow learning tools: peers, job aids, and EPSSs. Each moves the learner that much farther away from dependent strategies and that much closer to self-directed learning.



Trainers have a new and vital role to play in the overall success of a 5 Moments of Need learning initiative. They simply need to be integrated and involved in a way that makes their role apparent and intentional.

Finally, an essential part of getting started with the 5 Moments of Need is making sure the mindset of your learning function is focused on “performance first” rather than training.

KEEP METHODOLOGY AHEAD OF TECHNOLOGY

Throughout this eBook, we have touted the value and power of an EPSS, stating and restating how critical it is to any successful 5 Moments of Need strategy. But the truth is, if you don’t have the right methodology in place before you invest in an EPSS, your 5 Moments of Need efforts will fail. Methodology begets technology (that is one of Bob’s favorite sayings!). If you get the methodology right, the technology will follow.

One of our experienced team members, Sue Reber, recorded a podcast last year called “Using the Tools You Have”. In it, she talks about focusing first on methodology and building EPSS capability in whatever tools you already use. Click the play button to access the entire podcast.

EMBRACE EPSS CAPABILITIES

Whether you’re building EPSS capability in existing technologies like SharePoint, or you’re investing in a dedicated EPSS authoring system from a vendor, it’s critical to know exactly how it functions and enables workflow learning. Here, Conrad provides a complete definition:

Gloria Gery provided us foundational insights to the discipline of performance support in her 1991 book *Electronic Performance Support Systems – How and why to remake the workplace through the strategic application of technology*. In this seminal work, Gery makes the case for investing in a specific deliverable called an EPSS.

In Chapter 4: What is Electronic Performance Support, she states that the goal of an EPSS is “to provide whatever is necessary to generate performance and learning at the moment of need.” In the same paragraph, she charges that an EPSS must be “universally and consistently available on demand any time, any place, and regardless of situation, without unnecessary intermediaries involved in the process.”

Gery makes a distinction between her vision of an EPSS and traditional help systems, job aids, and computer-based training. Her version of an EPSS is “a hybrid concept: it selects the best of previously independent species—and through its combinatorial approach, produces a new breed that has familiar attributes but is inherently different at the same time."

Outside of her book, Gery provided a more detailed description of an EPSS as an “Orchestrated set of technology enabled services that provide on-demand access to:

- integrated information
- guidance
- advice
- assistance
- training
- tools

to enable high-level job performance with a minimum of support from other people.”

We have made great progress since 1991 in the technology and methodology for developing this kind of a performance support solution. If you want some clarity as to why your organization should pursue EPSS capability, then read Gery’s book. It makes a clear case that:

1. Organizations aren't effectively managing the tactical, day-to-day performance of their people because they lack the ability to see it and actually manage it.

2. We have evolved to event-based training solutions that are too disconnected from the actual workflow (what Gery calls the Performance Zone).

3. Properly designed Electronic Performance Support Systems are the solution.

"An EPSS is a hybrid concept: it selects the best of previously independent species - and through its combinatorial approach, produces a new breed that has familiar attributes but is inherently different at the same time." - Gloria Gery

Additionally, Conrad explains that a performance support architecture has at its core software that authors and deploys performance support solutions. This authoring software orchestrates needed learning and reference assets into performance support solutions that can be made contextually available to employees from within other software applications, at the employee desktop, through mobile devices, and via print. It also brokers reference and learning assets housed at SharePoint sites, on servers, behind the walls of an LMS, etc. This brokering capability allows the assets to remain at their various sites but provides 2-click/10-second access to them in all the ways needed via the performance support solutions created through the software.

He goes on to share an example from his personal experience of why an EPSS is so needed and how it can enable better performance, resulting in happier customers:

A few years ago, I accidentally dropped my mobile phone. It immediately took on a life of its own. It entered text without my help. It refused to respond to my finger tapping, sliding, and even pounding, and it made random calls to people in my contact list. If you saw a call from me, there was a good chance I wasn't aware of making it.

With a dim recollection and hope that I had phone insurance, I drove to my carrier's store to get this resolved. As I entered the store, there were people strewn throughout who looked like customers. I also noted 2 different desks with 3 people behind each desk working with some of those customers.

I was immediately greeted by a friendly person holding a tablet. She asked me what I needed. I told her about my lunatic phone. She entered my phone number and let me know that I had about a 30-minute wait. I asked if she could check to see if I had insurance. She informed me that she couldn't do that but that one of her associates would help me as soon as they could.

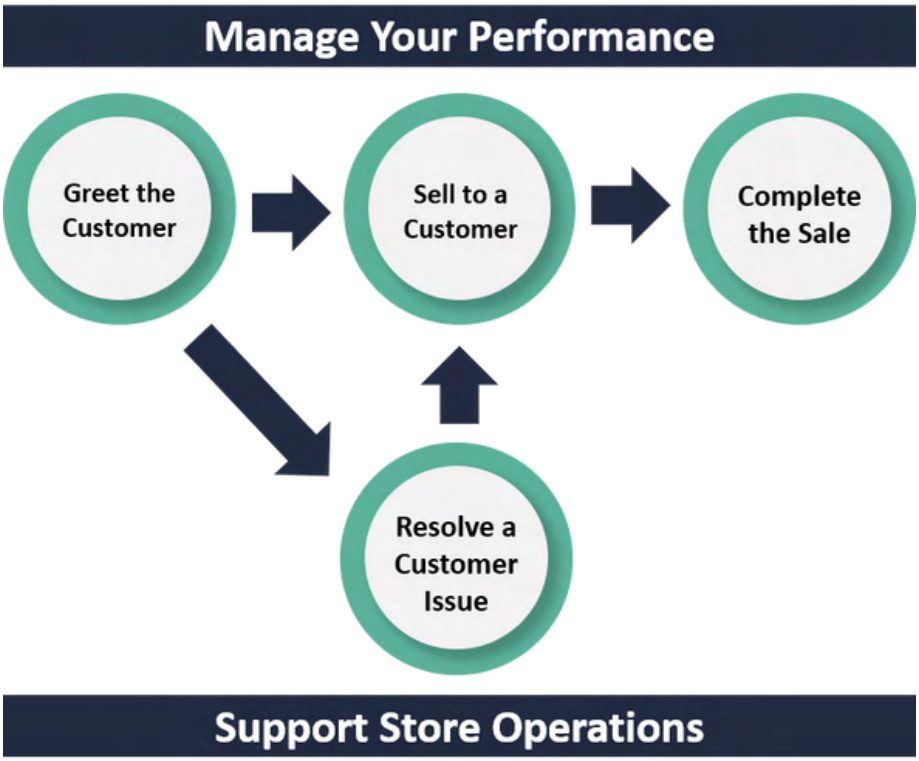
One hour and 6 minutes later, an associate helped me. She took 15 seconds to confirm that I indeed had insurance and then gave me a brochure with a phone number for me to call to have my phone replaced via overnight shipping.

This was a ridiculous waste of my time. What frustrated me was the reality that I had actually worked with this company's global training group helping them design a workflow EPSS that would have prevented this waste of my time. Had they opted to implement the plan we had put in place for them, the associate meeting me at the door could have, within 2 clicks, accessed the steps for checking my account to determine if I had insurance and then tell me what to do. I would have been out of the store within 3 minutes – a happy customer.

In the EPSS design methodology we've developed, we have an approach for mapping the workflow. The first step in this methodology is to establish a "Scope Objective" that guides SMEs as they map their workflow. Here's the one we developed for my mobile supplier:

"Identify the tasks and associated concepts that Retail Sales Reps need to perform and understand to successfully sell, upgrade, set up, support, and educate customers from the sales floor."

Using this scope objective to guide us, we identified 32 tasks and organized them into the following 6 workflow processes:



Note the process “Resolve a Customer Issue”. Here are the tasks we grouped into it:

- **Identify the nature of a customer’s issue**
- Determine a solution to a customer’s issue
- Resolve a billing issue
- Resolve a device issue
- **Replace a phone**
- Resolve an education need
- Update an account
- **Transition to a sell opportunity**

Had my cell phone provider actually built the workflow EPSS we designed for it, **any of the three underlined tasks** could have been accessed within 2 clicks by the person who greeted me as I entered the store. The workflow EPSS would have provided my greeter everything she needed to act upon any of those tasks within 10 seconds. Had she done so, I most certainly would have responded to “Transition to a sell opportunity". I would have bought whatever I needed to protect my new phone from a similar fate.

More importantly, had the company used the results of our analysis to guide how they managed customers who step into their stores, they would have been more than ready for me. Instead, they turned to traditional content management practices to meet their performance support and learning needs.

The keystone of any performance support effort is a workflow EPSS, designed to support performance in the flow of work at the job task level.

Before you start building out your own EPSS capabilities to deliver immediate, intuitive, intentionally tailored aid to performers at their moment(s) of need, consider these questions:

Immediate

- Is the EPSS tightly embedded in the workflow where performers always have instant access to it, even when they are on the move?
- Can performers gain access to the specific set of steps and/or information within 2 clicks?

Intuitive

- When any performer arrives at any point within the EPSS, can performers interpret what to do and begin doing it within 10 seconds?
- Does the EPSS provide key contextual access options (e.g., workflow, job role, timeline, etc.)?
- How proactive is the EPSS in tracking performance and then offering assistance in real time?

Intentionally Tailored

- When a performer accesses the EPSS, is it readily tailored to their specific performance requirements with only the support resources specific to their role and the task they need to perform?
- Are the steps and associated resources in the EPSS optimally orchestrated so that performers have access to only what they need (just enough) to get the job done?

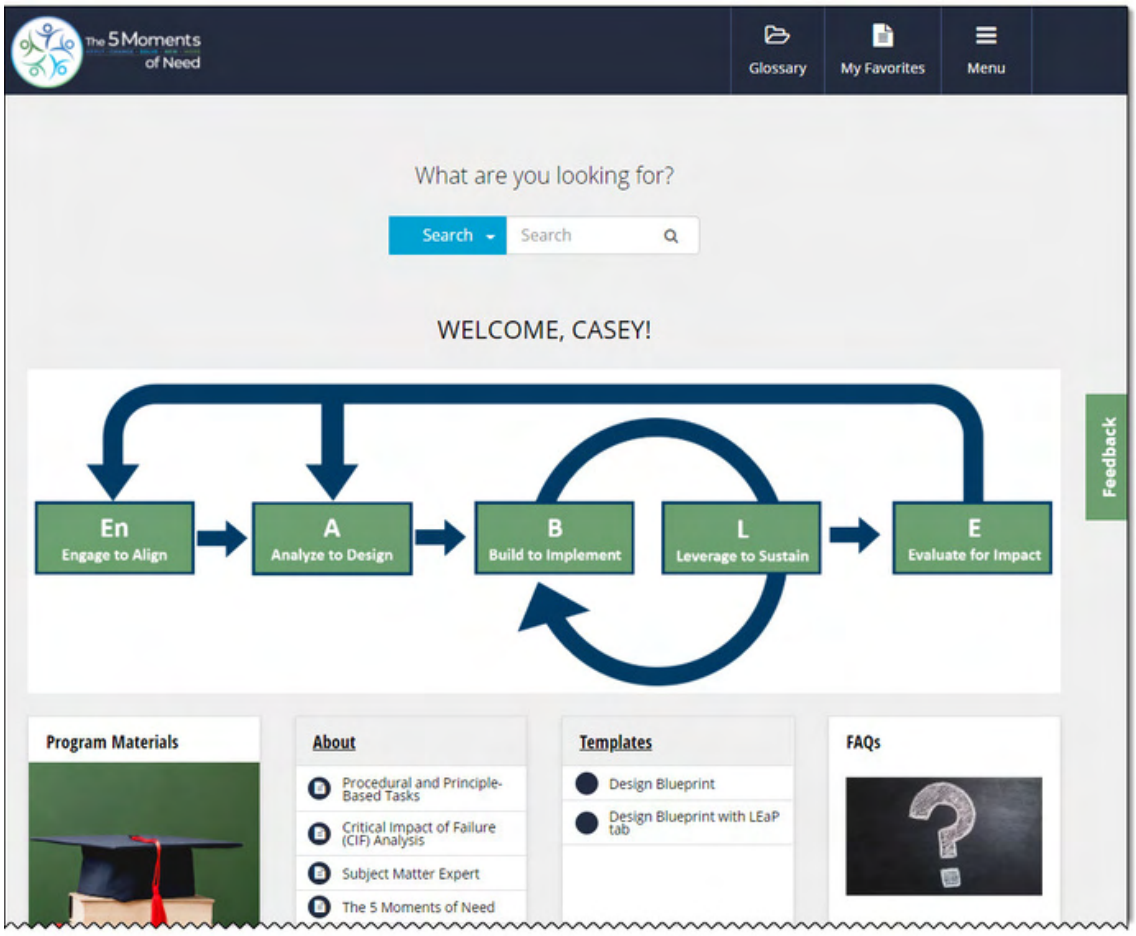
Aid

- Does the EPSS provide you the capacity to monitor and measure the effectiveness of its aid?

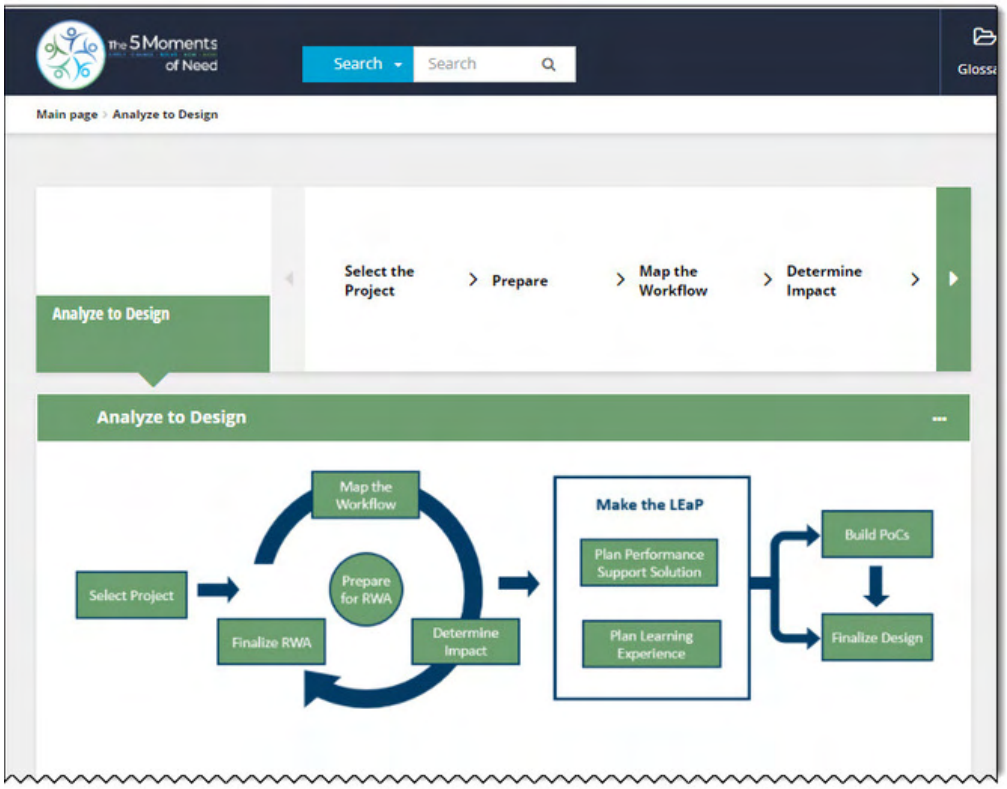
Moments of Need

- Does the EPSS seamlessly accommodate all 5 Moments of Need (New, More, Apply, Change, Solve)?

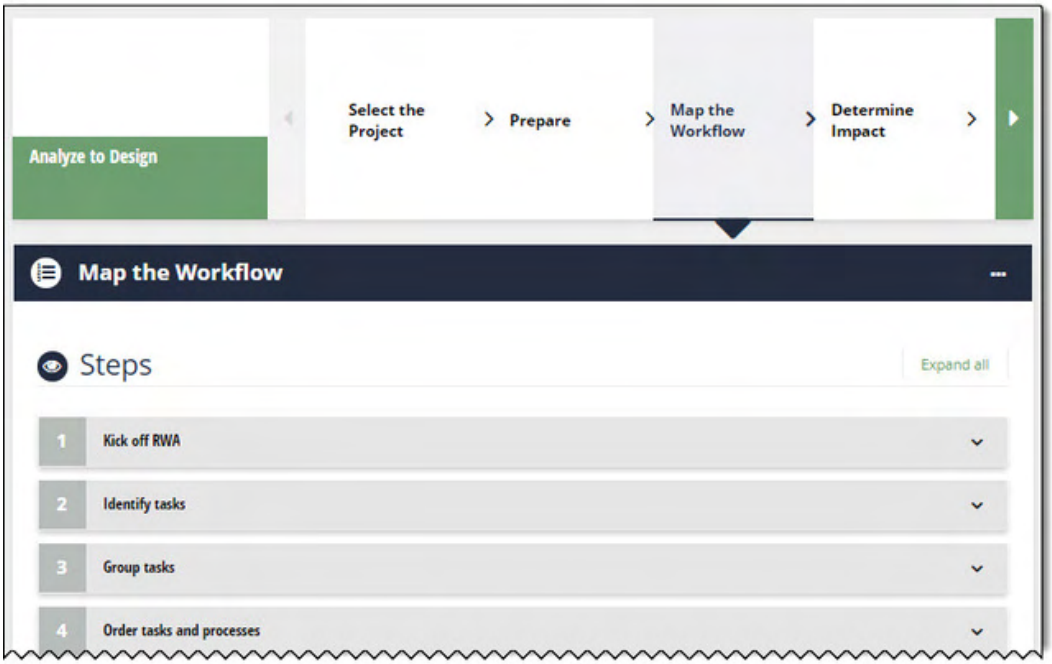
Now, what does an EPSS actually look like? The following is an example of the home screen for a workflow EPSS designed to assist instructional designers in developing Learning Experience and Performance (LEaP) solutions that support learners at all 5 Moments of Need:



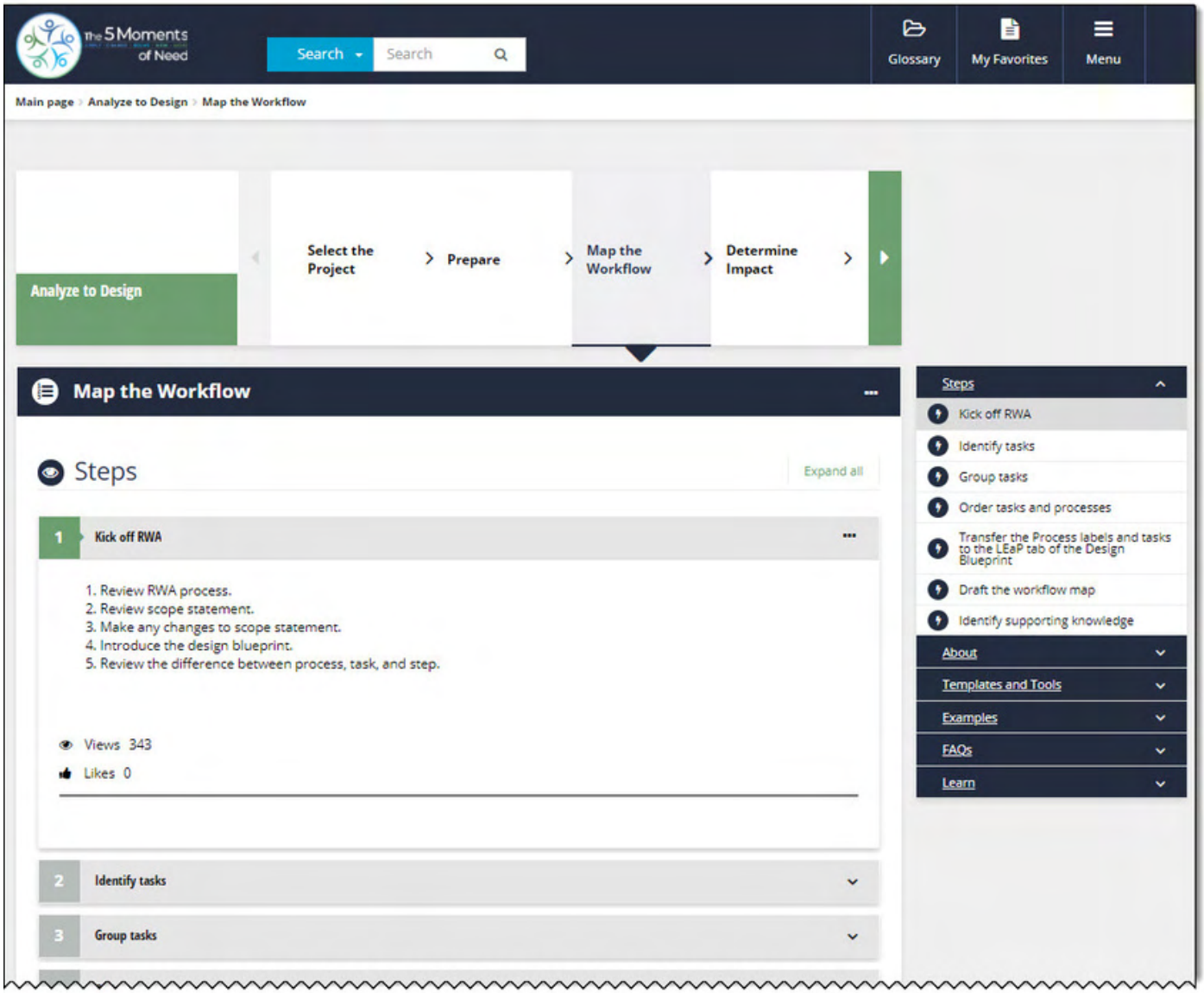
If in this EnABLE Workflow EPSS you select the “Analyze” tab or click on the “Analyze to Design” button within the EnABLE process graphic above, the following task-flow screen appears:



Each of the labels on this workflow graphic represents a specific task in the "Analyze" process. If you click on the task labeled “Map the Workflow”, the following set of high-level “quick-steps” for this task appears:



Note that it only took 2 clicks to get to these specific steps for this task. An experienced performer can quickly review these “quick steps” and follow them. But, if they have any questions about any step, all they need to do is click on that step to get to more detail. For example, by clicking on Step 1 above, the following detail for that step appears:

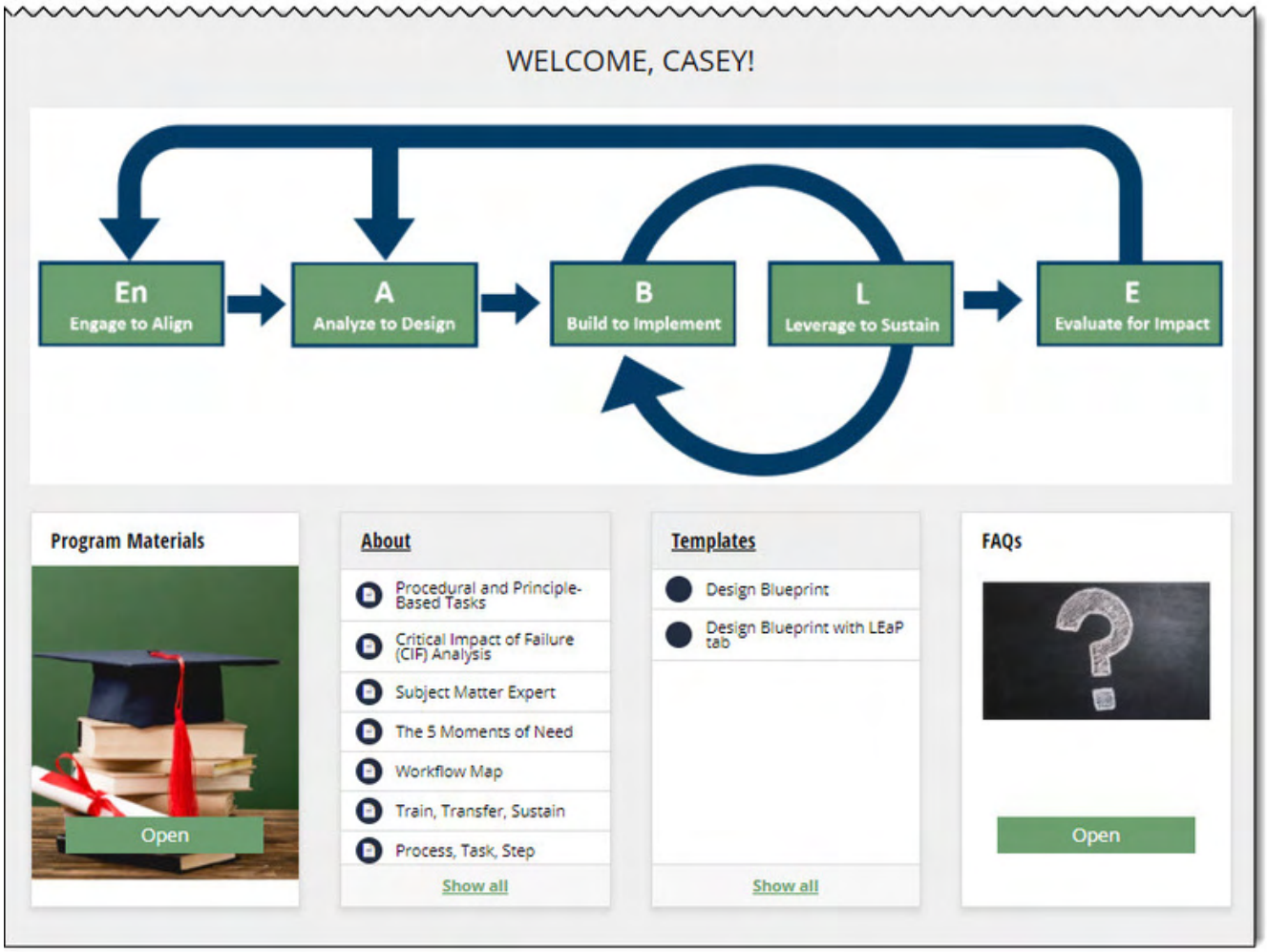


In a workflow EPSS, all the associated resources that an instructional designer needs to successfully perform this task must also be here within one or two additional clicks. Here’s how it works. In the graphic above, beside the listing of task steps is a set of tabs that provides access to different categories of resources an instructional designer might need as they perform the task.

For example, by clicking on the "About" tab, an instructional designer can access the supporting knowledge related to the task that could help them perform the steps with greater understanding. There are also support resources that an instructional designer needs access to as they perform the task. They can access them by clicking on the “Templates/Tools” tab. And if they have forgotten,

didn't pay attention, or haven't yet had time to receive any training on this specific task, they can click on the "Learn" tab to access specific learning resources that close the skill or knowledge gap.

The above example of a workflow EPSS is accessed from the following personalized workflow EPSS dashboard:



Currently, this dashboard only has two Apps. But it could have any number of Apps to support instructional designers in broader workflow responsibilities.

Gloria Gery has challenged us to develop EPSS solutions that support people as they perform their jobs. The example above was designed and developed to do just that.

Remember, in an EPSS all the resources are intentionally orchestrated to facilitate successful job performance at the task level. Every time people use an EPSS to support themselves in the work they do, they are learning in the workflow. They are learning as they navigate through the rugged challenge of applying what they have learned formally to the realities of their workflow. They are also learning when they use the EPSS to follow the steps for a task they've never performed.

They are learning when they use the EPSS to solve a problem that has cropped up. They are learning as they use the EPSS to adapt to change. They can even use the EPSS to briefly pause their work to access micro-learning "bursts" that target the same job task (thereby helping them learn something new or more about it).

In short, an EPSS is an essential requirement and the lifeblood of any 5 Moments of Need implementation.

WORK WITH BUSINESS MATTER EXPERTS AS WELL AS SUBJECT MATTER EXPERTS

You probably know the term "SME" (Subject Matter Expert), but "BME" (Business Matter Expert) might be new to you! A BME is the consumer of a learning solution. Both SMEs and BMEs play critical roles in workflow learning, so to help you think about how you will leverage them going forward, consider this perspective from Bob:

A quick story I recently heard from a colleague: "I was facilitating a design meeting to help create a course for new managers. In the room sat my traditional stakeholders: SMEs, or Subject Matter Experts. Coincidentally, two new managers were also invited to sit in and listen. One and a half days into what felt like an amazing data gathering exercise, one of the new managers spoke up and asked if they could share an observation. They said, 'Although all of this information is amazing and will ultimately make me become an effective manager, my BIGGEST concern is surviving my first 30 days without being fired or sued! You just filled 4 whiteboards with tasks each of you do every day. I hope to get there someday as well. The problem is that if this is the class you're creating for me, I'd be overwhelmed by noon of the first day, and wouldn't be able to use most of this anytime soon.' The room sat there dead quiet. The SMEs looked at each other and didn't really know how to reply. As far as they were concerned, everything they had shared was important to a new manager. What would they dare skip? We ended up starting all over with the new manager leading the discussion and the experienced managers adding color commentary. We refined the 4 boards of content down to 1 and reduced what would have been 3-5 days of training to 1-2."

Does this story sound at all familiar to you? I bet it would to your learners – NOT the SMEs, but the learners! For years, our design models and processes have pivoted on gathering SMEs in a room to help us design our deliverables, and they continue to be valuable contributors. But this story introduces a new stakeholder, one that was instrumental in making this new manager program successful: a BME or Business Matter Expert. A BME is the consumer of the program. They are the individuals that want to become SMEs someday, but are miles from that in their development and ability. They are also the ones we've been over teaching for years and, as this one so amply stated, overwhelming at the same time. Introducing a BME into your design models will have a few powerful results.

First, it will force you and your SMEs to take a closer look at the word "important". To a SME, all tasks are important, but to a BME, certain tasks are critical. There's a difference. Frankly, all that it

takes to be a good leader is important, but only certain tasks are critical to survival, especially in those all-important first few months. The rest can be learned later in the workflow where learning is optimal. How do you differentiate from a design perspective? Criticality is defined by the result of failure. Tasks where the impact of failure is hurtful, destructive, or unrecoverable need to be taught. Remember the words of the BME in the story: "My BIGGEST concern is surviving my first 30 days without being fired or sued!" Those tasks are critical to a new manager! The rest should be supported and learned on the job.

Second, using a BME will force you to design a truly blended learning program that includes both training and performance support deliverables. The elephant in the room for years has been that our SMEs help us design deliverables that over teach. We (I include myself in that pronoun) have been overburdening our classes, elearning, and most every training deliverable we've ever built with too much content. That's because a SME can handle everything. A BME can't. They will force you to move the non-critical tasks to the workflow to be learned later. They know how much they can handle and will want support to learn the rest when it's time. Performance support is the tie that binds. It's the missing link in a true blended learning solution. When married with training and introduced as a support tool in the classroom, performance support allows the classroom to go from 3-5 days of too much content to 1-2 days of critical and must-know information.

"Using a BME will force you to design a truly blended learning program that includes both training and performance support deliverables."

Finally, leveraging BMEs will create a stronger relationship between L&D and your lines of business because you will pivot more on the true workflow than an assumed one. It has always amazed me how little we know about the workflow our learners return to. We know what it should be, or ultimately could be, based on the SMEs' view of the work – but that's not the true workflow a BME comes from. Many SMEs have been removed from the workflow that a BME tries to survive in each day. Great sales reps become sale managers and are removed from the field. Great employees become great leaders and promote themselves out of the daily duties of a frontline manager. The list goes on and on. These rock stars become SMEs. Unfortunately, most have understandably lost the perspective of the new learners they once were. Adding a BME to your design mix will introduce you to the realities of the line of business in ways we haven't understood or been a part of in years.

I'm NOT saying that SMEs are going away! They are still an important part of our design process, but with workflow learning coming of age, as well as the incredible embedded learning technologies that can support it, we need to reorient ourselves around the realities of the workflow as it exists today. The BME is the new stakeholder that must be a part of the process.

ESTABLISH A COMPREHENSIVE CHANGE MANAGEMENT STRATEGY

As we've said, at its core, the 5 Moments of Need is a change management effort. So, what does that mean? Haven't we all seen major change initiatives fail? Are there ways to ensure our workflow learning efforts don't suffer that fate? In an interview with Dr. Timothy Clark, Conrad asks him to address how change is best led and the key challenges a team faces when approaching a change initiative. Topics that come up include psychological safety, naivete to disruption, resistance to change, leadership competency, and more.
Click the play button to the right to access the complete podcast.

Brand for the Business

How we talk about and brand our workflow learning efforts, especially performance support, can significantly impact adoption and success. We all know that L&D terms don't necessarily translate well to the business world! Similarly, the more we can take advantage of new and smarter tech as part of our performance support efforts, the more successful those efforts will be. Let's look at both issues, starting with Conrad's take on branding:

When it comes to performance support, constantly rebranding what we do and create isn't helpful. We need to consider our stories associated with this discipline. IBM today is certainly more than "International Business Machines". Although its brand image has remained constant, it has - by necessity - changed its stories around that brand to remain relevant and current within its different markets. Thirty years ago, Gloria Gery branded a very powerful performance support deliverable as an EPSS. The last thing we should do is worry about changing this brand. Instead, what we should do is strengthen the stories around it and make them meaningful to L&D and those L&D serves. I'm not suggesting that in our performance support marketing strategy outside of L&D we even need to use the EPSS brand. We certainly need to consider our marketing stories to include business stakeholders, IT leadership, HR, and any other group needing performance support.

For example, for every EPSS instance we help create, we tailor its branding story according to its audience, function, and the organizational culture. Within L&D we have remained consistent in our branding, but outside of L&D we seldom refer to the EPSS we produce as an EPSS. For example, we've recently positioned an EPSS to a line of business as a "Digital Job Coach", to another organization as a "Job-Task Navigator", and to yet another as a "Sales Accelerator".

MAKE IT AS SMART AS YOU CAN

Now that we've considered the aspects of branding your performance support solution (both in and out of L&D), let's explore ways to make it "smarter" with new technology.

Here, Bob explores this emerging field:

Smart performance support observes performers' behaviors, generalizes to best practices, adjusts

to individual needs, and is maintained by all stakeholders.

We are making great headway in our capacity to develop “smart” performance support solutions. They are smart to the degree that they:

- Know who you are and where you are in the workflow process.
- Observe performance patterns and adapt to what you're doing.
- Anticipate and prompt you on what you ought to do.
- Learn and evolve along with the business.

This kind of performance support is possible. Here’s an example of what smart performance support can do:

Suppose you are a sales rep and you log in to your CRM to manage your sales calls. The performance support solution integrated with your CRM provides you a prompt with system updates specific to your sales role. As you move within the CRM, the performance support solution tracks where you are and automatically adapts its content as you move from screen to screen. When you enter sales data into one of the financial fields, you receive a pop-up instruction box that helps you understand and comply with certain internal guidelines. Where applicable, it offers you best practices based on sales data that has been captured and mined, such as intelligence on competitors, titles of sales prospects who have signed deals, deal sizes, how frequently the prospects were contacted, and which sales resources are most popular. These best practices are dynamically generated based upon the behavior patterns of the top-performing sales reps.

Of course, this doesn't all just magically happen. Today, it still requires a human to train the system! The training happens by creating business rules that begin with logic like, “when the rep is at this step of the process, offer them this kind of support.” So, if the sales rep is scheduling calls, offer them the data on the job titles and contact frequency that was gathered from the top performers. The best part is that the business owner can create and maintain their own rules.

This is a good start for smart performance support but take where we’re going in other areas outside of learning and development. These smart technologies have significant implications on where EPSS authoring technologies will go in the not-so-distant future:

- Netflix suggests videos to watch.
- Alexa, Siri, and Google Home respond to voiced questions, set reminders, and integrate with other technologies.
- Amazon goes so far as to have ALL these “tailored-to-me” categories:
  - More items to consider
  - Related to items you’ve viewed
  - Inspired by your browsing history
  - Additional items to explore
  - New for you
  - What other customers are looking at now

Clearly, there is a long way to go to realize the potential of "smart" performance support, but the building blocks exist, and the future is bright!

FOLLOW CONTENT MANAGEMENT BEST PRACTICES

Without effective content management, the 5 Moments of Need solutions you produce will be rendered useless. Why? Because in today's world, resources are rapidly and frequently revised, swapped out, deleted, etc. If a learner continues to access inappropriate or outdated resources in their moments of need, they will stop using the workflow learning tool that serves up those resources.

Early in 2021, Bob and Conrad shared a podcast in which they discuss their perspectives on "Content Management 2.0". You can access the complete recording here:

Here are some highlights:

- Learning content management is a discipline that helps us manage the content vs. it managing us. It's a subset of larger content/knowledge management. Reuse and keeping content current are critical themes.
- The goal is to solve problems in the organization (vs. in learning). You can start without an LCMS because there is much to do in advance of implementing any system.
- The 5 Moments of Need framework helps with meta-tagging (beyond just finding content) in terms of context, personalization, and user-generated content.
- Governance and maintenance are "make or break" with this discipline. Maintenance means content is current, vibrant, and easy to change/adapt. Governance is critical in the workflow because the content belongs to the business (not L&D), so governance is critical for a relationship with the business.
- When it comes to technology, if you have a structure, technology is irrelevant and only as smart as that structure (aka bedrock).
- Getting started with content management:
  - Perform a current state analysis (doesn't require tech) of deliverables and their value.
  - Perform a future state analysis (doesn't require tech) of how to consolidate and support across the 5 Moments of Need.
  - When you structure/build to that end, you can start to invest.
- We must link content to performance.

Let's explore a critical point in greater detail: content currency/relevance. Workflow learning solutions like an EPSS are used to the degree that they remain current and relevant.

The risk of outdated content alone can cost-justify the investment in EPSS authoring software. Because an EPSS is embedded in the workflow, employees using it can flag out-of-date content.

Change notifications can be directed automatically to designated content stewards. Changes made by content stewards can be efficiently curated, tagged, prioritized, and then pushed back out

through the EPSS. An EPSS powered by the right software provides the only scalable means for L&D to fulfill its responsibility to keep the content of workflow solutions current.

Performance support solutions must be relevant. Performers will initially judge a tool by its “curb appeal”. They will ask, “Will this thing help me?” The question is readily resolved by incorporating the performance support solution into formal learning. However, long-term use is based upon the solution providing access to information and resources that are current and relevant to their specific needs at every moment of need. Long-term currency and relevance present a significant optimization requirement. The functionality of the EPSS must remain relevant along with content and resources.

If we are serious about addressing the broader workflow learning landscape, we must figure out how to manage our learning content and automate that management as much as possible. In addition to everything we are building to support formal learning, we also have performance support deliverables with the organizational challenges of pushing learning into the workflow so people can learn while they do their work. Curation is a critical but small part of this broader realm. At the heart of it, we need the ability to publish and maintain content from a single source. We need to be able to deliver content, unencumbered, through any and every channel needed. For example, the steps for a specific job task might be required in an activity workbook for classroom instruction, within an elearning module, as a printable job aid, and available within an EPSS that is delivered via mobile devices, at the desktop, and within an embedded help system. If you multiply this need by the number of job tasks associated with a specific job role and multiply that across the many different job roles in an organization, you have a huge learning content management challenge. And this is just part of it.

The good news is that this can all be done without boiling the ocean. But it requires clear sight of purpose, intent, and need. There are certainly technologies in place to help, but landing this big fish requires us to understand the kind and size of fish we need before we select our fishing gear. We must also chart our course to where we can catch our fish. (That's strategy.) It's time to turn our attention back to this critical need. There is no way we can get to where we need to be without going after this fish.

CONCLUSION

It's easy to get caught up and stalled in the many requirements we've listed for workflow learning, but the MOST important requirement is just getting started! If you're waiting for a time when the stars align to give you the perfect environment with the exact right project and all the right players and all the right support, you will be waiting a long time. Certainly, keep in mind the requirements we shared, but don't let them prevent you from starting your 5 Moments of Need journey. It won't be quick, and it won't be without some degree of "failing forward", but it will be worth your time and effort!

CHAPTER SIX

"IN THE TRENCHES" STORIES, EXAMPLES, AND ADVICE FROM PRACTITIONERS

By now, you've hopefully learned a lot about the 5 Moments of Need, but you've only been hearing from us. So, we think it's time you hear from learning professionals in a variety of organizations who are at different stages of 5 Moments of Need adoption and maturity. In this chapter, you'll find podcasts, interview transcripts, and blogs from and about 5 Moments of Need and workflow learning practitioners who have been eager to share their relevant experiences, lessons learned, and advice.

Let's start with a podcast about "Making Workflow Learning Work in a Pandemic", featuring three learning leaders who have been implementing workflow learning for some time: Bill Hickey, Axalta; Doug Holt, Council of the Inspectors General on Integrity and Efficiency (CIGIE); and Mark Wagner, The Hartford. Click on the play button below to access the complete podcast.

Key areas covered include:

- What workflow learning means to them
- Why now is a great time for workflow learning
- Getting started
- Role changes
- How L&D is seen differently because of workflow learning, especially now
- Role of the EPSS
- How they have persevered
- Advice

MORE FROM THE HARTFORD

If you'd like to hear more from Mark Wagner about The Hartford's workflow learning experience, in this podcast he goes into much greater detail about how his team started building EPSS capability in SharePoint – how they socialized, integrated, and rolled out the tool – and shares how COVID-19 impacted their efforts.

Mark also offers advice to other leaders who are making their workflow learning journeys. Click on the play button to the right to access the podcast.

MORE FROM CIGIE

Similarly, if you'd like to better understand Doug Holt's 5 Moments of Need experience at CIGIE, read his blog post titled "The Siren's Song – Thoughts on Making the Transition to 5 MoN". In it, Doug, who is a 2021 recipient of the 5 MoN Trailblazer award, shares some humorous perspectives, great advice, and his team's experience to date:

"Come closer, famous Odysseus – Achaea's pride and glory – moor your ship on our coast so you can hear our song! Never has any sailor passed our shores in his black craft until he has heard the honeyed voices pouring from our lips, and once he hears to his heart's content sails on a wiser man." - Homer's *Odyssey*

Like the sailors of myth, learning professionals have been seduced by their own version of the Siren's Song and under its influence are unwittingly running their "ships" – learners and organizations – aground upon the shoals of unfulfilled expectations. That "song" is the deeply ingrained training department/university model that holds our industry hostage against progress and so entices those it touches that we as a profession should consider adding "Proud Member of the Stockholm Syndrome Association" to all our marketing materials. Borrowing from comedian Jeff Foxworthy, you might be an Association member if:

- It's not a big deal to you that artistic renderings of learning events from the Middle Ages look a heck of a lot like the learning events of today.
- You aren't aware of current work-learning research or are aware and ignore it.
- Training is your purpose as a learning professional.
- You're sure the next training fad will be "it!"
- Kirkpatrick Levels 1-4 (or 5) are the Bees Knees.
- You believe true ROI is…darn it…just not possible because training outcomes are dependent upon SO many external variables.

Let's say, though, that you've begun to imagine breaking free of The Association. Perhaps you're even entertaining impure thoughts about leading an organizational transformation to a performance-based orientation to learning. Great! But what's the next step? How do you begin the transformation?

Having once been at this very same jumping off point and having then confidently (but erroneously) taken next steps in the entirely wrong direction – and being hopelessly lost at times – "begin the transformation" almost didn't happen. But then it did…gradually and then suddenly (hat tip – Ernest Hemingway's *The Sun Also Rises*). In the spirit of trying to help others better navigate their "begin" moment, I offer the following lessons learned:

- Invest your time and professional development dollars in getting up to speed holistically on the 5 Moments of Need framework.
  - Corollary: Allow yourself to be confused as you learn. It all makes sense eventually.
- Don't waste your time trying to explain the shift to a performance-based approach. Just assume that the broad community of stakeholders won't actually "get it" until you have a no-kidding demonstration product to show them that's applicable to their work.
- Target an individual stakeholder in an underserved area of your business as your partner. The underserved are more likely to be willing helpers and will appreciate getting top-of-the-line, impactful learning support in return.
- Get started but start small.
- Work under the radar.
- It's much harder than you think. Stick with it anyway.

"Get started but start small."

Following this approach, my very small team has completed or is scheduled to complete: (1) RWA (Rapid Workflow Analysis) on all four of our major career fields; (2) the construction of a prototype EPSS for one of those career fields and the initiation of work to build it out into the "real deal"; and (3) the buildout of our first-ever 5 MoN-based class. All of this occurred in less than a year, starting from zero, and was accomplished by people who all have significant "day jobs".

We are succeeding. You can too!

MCKINSEY & COMPANY

McKinsey & Company is another well-known global organization that has also found success with the 5 Moments of Need framework. In this interview, Katie Coates shares "McKinsey's 5 MoN Journey", including their efforts to date (e.g., a performance support tool for consultants and a "How Do I" series for people managers), what she would do differently, and advice to fellow practitioners. Click on the play button to the right to listen to the complete podcast.

SAINT VINCENT HEALTH SYSTEM

Because choosing your first project is critical to gain traction for additional 5 Moments of Need efforts in your organization, we interviewed our colleague Molly Petroff, who recently retired from Saint Vincent Health System after an amazing career in healthcare. Molly also won the 5 MoN Trailblazer award in 2019 for her incredible workflow learning efforts at Saint Vincent.

Here, we pick Molly's brain about "Picking the Right First Project":

QUESTION: What got you started in performance support in the first place?

MOLLY: We had been making pocket cards and other job aids for years – basically what we equated to performance support. But I attended one of Bob and Con's breakout sessions at Masie's Learning 2009 and realized we had only been scratching the surface. We had been treating performance support like things, like those job aids, but in the presentation, it was more of a concept or a learning philosophy. The ideas just fit for us. It was evident that this is where we needed to go.

QUESTION: What made this first project the right place to start?

MOLLY: We were looking at several projects as a starting place, from leader onboarding to performance support for the installation of a new Electronic Medical Record (EMR) system. But as we were in the process of narrowing it down, the hospital underwent a survey from a certification agency, and we fell out in an area of emergency safety. So, this project sort of fell in our lap. We took care of the immediate problem, but then started planning for this performance support solution so we wouldn't be in that situation again.

QUESTION: How did you get stakeholder buy-in, both in your learning group and in the "business", for this first project?

MOLLY: After I came home from Learning 2009, I started trying to share what I had learned with my team, using Con's and Bob's slides and my notes. When Learning 2010 came, our entire team went and followed along with the performance support track. It was what we needed to get everyone's buy-in and, luckily, we had grant money to pull it off.

Before we even chose a project, our director wrote a proposal to institute performance support to our SVP and then to our entire senior leader table. We needed their support for the concept before we even ventured down this road because this was going to be a huge shift in learning for our organization. They did approve, by the way (obviously).

Then, when the survey results were given, the importance of everyone having immediate access to correct information was felt house-wide and no one even questioned that this was the best place to start.

QUESTION: Many struggle with the perceived effect this will have on their existing learning team and roles. What has made performance support "doable" for your team?

MOLLY: Our department is relatively small. There are three of us who are full-time and two who are semi-retired, working a couple days a week. But even with this small group of people we each have different talents that have really facilitated this process; there really is a place for everyone in this project – from the techie to the analytical person to the people person to the graphic designer. Everyone has found a spot where their contribution is vital to the project.

QUESTION: What has been your messaging around this? Have you done anything specific around getting the message out to the various stakeholders?

MOLLY: We involved stakeholders in the process from the start. They were part of the task groups that did the Rapid Workflow Analysis (RWA) for the various codes. As the different groups started the process, we explained the idea of performance support and what our project included, and then showed them the current mock-up of our "home page", if you will, and one of the quick step graphics, so they would have an idea of where we were headed. By the time we were done with this discovery process, there wasn't a single person we worked with that didn't see the value of what we were building. More often than not, the reaction was, "When can we have this?"

QUESTION: What's your rollout strategy?

MOLLY: We are planning to beta test the SV Safety GPS with the people who helped us to build it. That gives them the chance to see the fruits of their labors before it goes live and allows us to get some feedback on functionality. This will also give us a chance to put a marketing plan in place. We are hoping that two weeks later we will go live house wide. There will be a short learning program for all associates started from the Safety homepage that will introduce the resource.

QUESTION: What do you see your next project being and why? Has this first project affected that next step?

MOLLY: Since this project included so many different groups of people, all of whom have seen the value of performance support, they have started coming to us for our assistance with a "perfect project". We have needed to prioritize projects based on organizational impact to sort which should be next. We never expected to end up with a waiting list.

We have already started our next project. As the Safety program started getting toward the end of the discovery process, we started working on performance support for individuals as they perform their roles in relation to the patient's progress through our system. [It's] a huge project actually, but we plan to provide access to pieces as they are developed.

QUESTION: What advice would you have for someone just starting out? What three things would you do again, or differently?

MOLLY: I think it's a good thing that our director took the performance support concept to the senior leadership before we even picked a project. Whetting their appetites for a better method of providing people with the information they need, when they need it, I think made it less of a foreign, chancy step when we adopted a high-impact project first.

Advice? Be prepared to stumble. It is okay. At the beginning, Con came out to help us with our first two days of the RWA. Then we tried to carry on by ourselves with his example. It was rough at first, but we got better as we went along and explained to everyone that we were learning about this, too. I think people enjoyed being a part of something new, something different.

In the beginning, our entire team participated in every discovery meeting. But as we moved along through the process with different groups, it became impossible for us all to be present, so we made it a rule that there needed to be at least two of us present at meetings. The different talents and points of view help us to glean what we need from meetings.

So, let's see – I think that's three: get buy-in before you need it, be prepared to stumble, and, if possible, try not to take this journey alone. Everyone has a place to contribute.

"Get buy-in before you need it, be prepared to stumble, and, if possible, try not to take this journey alone."

- MOLLY PETROFF

INSIGHTFUL L&D

Sam Allen from Insightful L&D shares his perspectives on the purpose of L&D (to help people perform effectively and prepare for their next roles) and why L&D struggles to design for performance (e.g., "you can't learn to swim in a classroom"). He also shares details about some of his recent workflow learning efforts for clients, plus advice to beginners. Click the play button to the right to access the podcast.

HUBSPOT

If you feel that your learning organization is still in the "order taker" vs. strategic partner position, listen to Bob's interview with Meghan Castillo, Principal Learning Experience Designer at HubSpot. In it, she shares how she is shifting her team to be more focused on developing solutions that leverage BMEs (Business Matter Experts), rather than taking orders from higher level colleagues who may not know the true challenges performers face. Meghan addresses change management, user-generated content, and how the 5 Moments of Need help in the design process to restructure the "download" of content. Click the play button to the left to access the podcast.

AJW AVIATION

Let's get another perspective on how performance support can be implemented for the first time. In this blog, titled "Covert L&D – Implementing Performance Support for the First Time", James Pitty of AJW Aviation shares his team's experience of getting started:

I spend a large amount of my time researching current trends, ideas, models, and musings within the world of L&D.

There is no doubt that the performance support movement, spurred on by pioneers such as Charles Jennings and Nick Shackleton-Jones (and many more), is gaining more and more attention. The reason for this is simple. It makes sense. Learning must happen close to or at the moment of need if companies, teams, and individuals want to see any meaningful impact on performance. Having worked as a schoolteacher before entering the world of L&D, I can tell you that education is a terrible model for learning and performance in the workplace.

So, how many of us have had a go at influencing and implementing performance support? Something I've learned is that this isn't something you can just do. You can't simply turn up to work one day and say to your boss, "Hey, enough with the courses. Let's focus on performance support."

Senior Execs haven't got time to listen to a bunch of theory and research, even if this has been

successfully implemented elsewhere. It is imperative, therefore, that L&D professionals master the art of covert operations. By this, I mean finding a small project to begin with – and a small group of participants who are willing to be your test subjects – and produce something with real results that can be presented and shared internally using stories from your very own workers.

That is exactly what I and my team had started when a senior exec asked for a training course for our managers. The request sent a shiver down my spine. We had tried this before using only traditional face-to-face methods. The result? Half of the management population can't remember even attending let alone what they had "learned". The other half never even turned up due to team absence, high workloads, and poor memories (despite calendar reminders!). Luckily, long before this new request came, our covert operation had already begun.

I had managed to gain agreement with my HR director that sending all of our managers to a one-size-fits-all course was the wrong way to go, and I used the following reasoning:

- What one manager needs is different from what another manager needs. One may be experiencing high turnover and therefore not only has to understand and master the recruitment and onboarding experiences, but also work on whatever skills and behaviors are needed to stop staff from leaving. Another may be dealing with conflict within their team. Another may have a team of high performers, so career development is high on their agenda. For others there may be some behavioral aspects of their management which need addressing based on staff feedback.
- Managers (and all staff for that matter) should have access to information and resources that help them before and during the moment of need. HR cannot be there for every manager every time there is a "people

issue" and we can't afford to spent large amounts of resources developing classroom training that, for some individuals, occurs months before or months after the learning is needed.
- It's expensive and yields very little return.

She agreed. So here is what we did.

1. We started by breaking down what the business required of its managers. These are management core processes such as managing absence, managing poor performance, PDR, recruitment, etc. We then mapped out a toolkit for each of these processes that could be used in the workflow. For each toolkit, we consulted with our target audience and added in resources based on their feedback. Anything that needed to be face-to-face was designed as a scenario exercise or a guided peer-to-peer social learning event. Other resources included checklists, videos, templates, and quick reference guides.

2. To make sure managers understood the importance of using these resources (to access the affective context model by Nick Shackleton-Jones **click here**). We ran a series of informal "lunch and learns". Where possible, these were also scenario based or focused on peer-to-peer conversation about their experiences with the process.

3. We also ran a series of focus groups with various teams and individuals to find out from them how things were going and what it was they expected or needed from their managers. This was then fed back to the management teams (this can get quite uncomfortable, so be sure to explain to the managers what you are doing and how this can help them). As a result, the managers discussed and agreed on a set of actions they would implement to address the negative feedback and enhance the positive. This always ended up being very simple things, such as more regular "one-to-one's", feedback, sit out of the office, ask me how my weekend was, "coach me don't tell me", etc. We could then also ask the managers what their concerns or reservations were with putting their plan into action and could create more resources and tools to support them (e.g., an informal one-to-one template and guide).

All the toolkits will be available through our intranet site on a dedicated page for people managers, where we will also share further insights (articles, etc.) linked to challenges our managers are either facing or expecting to face.

A next step will also be to create an online community for our managers to discuss certain topics and share experiences.

We have already rolled out three of our toolkits and seen a massive improvement in staff feedback as a result of the forums and subsequent action plans.

AXALTA

We'll wrap up with an interview of Bill Hickey at Axalta, who was also featured earlier in this chapter and is a 2021 recipient of the 5 MoN Trailblazer award. Bill and his team have been on the 5 Moments of Need journey for several years. In this podcast, he shares how and why they got

started with the 5 Moments of Need (L&D was getting blamed for poor performance even though learners tested well immediately following training events), challenges they've faced (impatience was a big one!), and how far they've come (L&D is being seen as an indispensable, valued contributor and partner to the business). Bill also shares advice, including that output isn't a course or eLearning module: it's the learner's performance, for which we need to take responsibility. Click the play button to the right to access the podcast.

"Output isn't a course or eLearning module: it's the learner's performance, for which we need to take responsibility."

CONCLUSION

As you have read and heard, no two 5 Moments of Need journeys are 100% alike, but they do share some positive similarities. When we hear from practitioners in the field that they are experiencing success because of their well-planned and implemented 5 Moments of Need efforts, that energizes us even more to keep sharing this approach with the broader learning world. We want to enable every organization to improve performance – in every moment of need, job task, and role!

CHAPTER SEVEN

WHERE TO FROM HERE?

In the past year of the pandemic, just about every aspect of the world – especially how we conduct business and support employees – has changed dramatically. Likely, the way we once pictured the future of our work has been shattered, so what does that mean for organizational learning and performance? What can we expect and what should we prepare for amid so much change? We believe that adopting, implementing, and investing in workflow learning will forge the path forward and empower organizations to adapt and thrive.

During the first wave of the pandemic in the US, amidst so many unknowns, Conrad wrote a blog titled "The Future Ain't What it Used to Be." In it, he provides insights about how organizational learning needs to evolve in this "new future" and how the 5 Moments of Need framework can enable that evolution:

Rapid, Adaptive Workforce

Never has the need for employees who can adapt to change been more critical and urgent. Today, a person's competitive advantage isn't defined only by formal credentials and/or informal skill inventories. An employee's value to the organization is also determined by their ability to adapt: to unlearn, relearn, and then perform effectively at or above the speed of change.

This adaptive capacity requires an accelerated approach to developing experience-enriched skills. Traditional training events struggle to develop practical experience because experience is best developed in the flow of work with the help of an EPSS. Experience gained solely through trial and error seldom leads to efficient performance. Consider intentionally supporting performers in their flow of work at the moments of Apply, Solve, and Change. It's especially during these dynamic workflow moments that performers develop the experience they need to perform at the speed of change.

Performer and Performance Focused

Forty-five years ago, I watched the battle among behavioral (instructional/teacher centered), cognitive (learner centered), and experiential (performance centered) theorists. All three areas of research made sense to me. They still do. What's desperately needed today is an ecumenical approach that doesn't pit teaching against learning and that focuses first on performance. In a performance-first environment, learners become performers. And, we employ the fundamental principles of teaching and learning to enable effective performance, collectively and individually in the flow of work.

Blend Brick & Mortar + Virtual with Workflow Learning

In 2020, we watched organizations move into triage mode, shifting learning from "brick & mortar" to virtual. Although this rapid move was completely understandable, most organizations are awakening to the reality that their approach to shifting face-to-face training into a virtual classroom hasn't been effective. Fifteen years ago, we developed a virtual learning model blended with workflow learning that we call GEAR. With this approach, learners achieve outcomes that far surpass traditional face-to-face training. The GEAR methodology is a blended, "spaced learning" approach that spreads learning out over time. This allows participants to immediately apply what they learn in the context of their own work.

In the GEAR model, "Gathering" online is only part of the learning journey. Following every session, participants "Expand" and personalize their understanding of what they have learned and then take steps to "Apply" what they have learned in their work streams. The final step in the GEAR cycle is to report on their efforts and "Receive" direct feedback. This feedback is where virtual trainers deliver their greatest value. It is the key to accelerated learning.

Partner with the Business

A 5 Moments of Need solution allows us to step into the world of workflow learning. The workflow is an area where we are guests. What we help create must not only be compatible with performers in their flow of work, but it must be kept current and constantly optimized to ensure its ongoing usefulness. There is no way to accomplish all of this in a timely manner with the limited resources allocated to L&D. This opens the door to a most important partnership with the full range of players in the business to develop, sustain, and optimize our solutions long term. This may include but is not limited to SMEs, Business Matter Experts (BMEs) who are actually doing the work, front-line managers, and anyone else who participates in the work. This is a crucial shift that finally pushes us to partner with the business in ways we should have been partnering all along.

Experience Curation

Every experience of our life contributes to our learning. When we perform successfully, fail, overcome a challenge, adapt to a new way of doing something, or seek additional understanding or knowledge, we are learning through experience. It isn't enough to just capture content or knowledge: we need to capture experience in a way that allows transferal of that experience to other workers.

Fortunately, performance-first methodologies require us to map the workflow, where experience is best developed. This mapping and the associated technology provide the infrastructure we need to capture best practices and lessons learned from the most experienced performers; then, make that experience available to others at their moment of need.

Blended Workflow Learning

Most approaches to blended learning remain tightly tethered to a formal learning experience facilitated with multiple formal learning modalities (e.g., blending elearning, on-the-job coaching, video training, instructor-led training (virtual or face-to-face), etc.). A true blend of learning must take into consideration the entire learning process across all 5 Moments of Need. For example, a complete learning solution must support learners as they transition from the initial stage of learning New and/or More to the moments of Apply and often Solve as they begin to transfer what they have learned in their flow of work. Furthermore, as learners become more proficient in applying the knowledge and skills they learned during training to the work they perform, there are often times when they must change how they go about their work. In those instances, they need to unlearn and relearn while performing work in the workflow.

So, the real blend must include provisions for supporting performance and learning in the flow of work while working.

Smart Push and Moment-of-Need Pull

It isn't and shouldn't be about only "push" or only "pull". Both are needed. We're huge proponents of adaptive learning (which is a "push"). And the smarter our solutions become, the greater opportunity we have to deliver informed "push". But especially at the moments of Apply and Solve, performers need the capability to "pull" what they need, within 2 clicks and 10 seconds.

As a matter of fact, the most efficient gap learning occurs in the workflow when a performer faces a work task that she doesn't know how to do. Within 2 clicks she accesses the steps for that task and follows the detailed steps to complete it. With another click she accesses a needed template that helps her successfully complete the task. A week later she needs to complete the same job task. This time she accesses the "quick steps" within two clicks, reviews them, downloads the template with another click, and successfully closes that performance gap.

Managers as Mentors

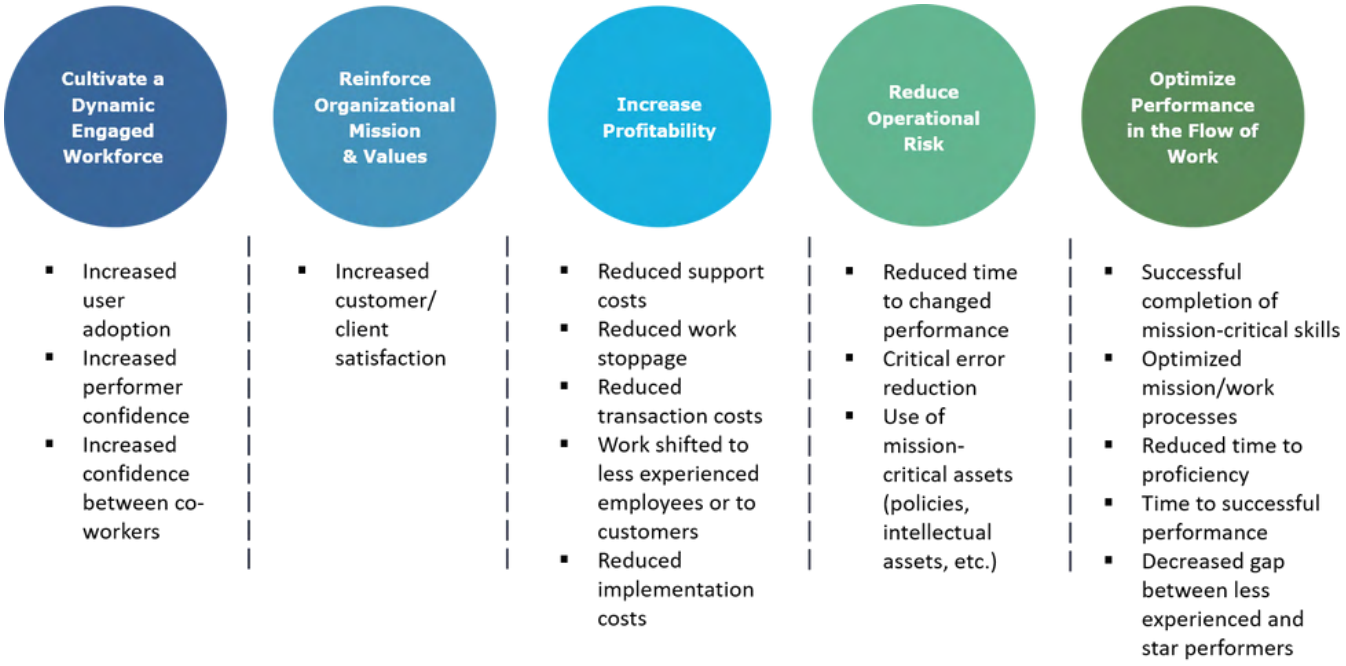
A properly designed EPSS is a digital coach that is available all the time wherever technology can go. While this certainly doesn't rule out managers providing coaching, frankly, a digital coach is often more reliable, current, and present. Besides, we need self-reliant performers in the workflow. In today's world, we can't guarantee that a manager will be present every time a worker needs coaching. For the most part, an EPSS can assume that role.

Instead, managers can be mentors. A mentor provides life and work guidance, opening opportunity and making growth and development resources available. Mentors inspire, lift, and motivate. They clear the path for fueling employee engagement. Managers are in the best place to be mentors, which is something technology can't duplicate very well, if at all.

Workflow Focused and Business Impact

We've always advocated for performance focus rather than training focus, but it's always been about performance in the context of the workflow. It's possible to focus on performance and miss the workflow. We've seen many great performance-based courses that fail to align with how learners need to perform in their flow of work. That results in a disconnect when learners attempt to transfer what they learn to their actual jobs.

Outcomes might actually work here as long as those outcomes deliver business impact. Traditional training has struggled to directly connect to business impact. But the moment we step into the workflow with a performance support infrastructure, we have in place the ability to measure impact targets like these:



Empowerment

Traditionally, the organization assumes primary responsibility for fueling employee engagement. But we are living in a time of disruption and discontinuity, which absolutely requires an engaged workforce where employees own their own engagement and where their engagement generates from the inside out. This alters the role of the organization, which must empower employees to fuel their own engagement by removing all barriers that can interfere with this ownership.

Real learning is anything we do to develop, expand, or reinforce our growth and development in any and all aspects of our life – no matter where it occurs. Most of this learning occurs outside formal events.

There's nothing wrong with event-based training as long as it's instructionally justified. But the challenge before us is developing our capacity to intentionally fuel learning outside traditional means.

In fall of 2020, Bob recorded a podcast about "What We've Learned Along the Way", which provides a "top ten" list for anyone embarking on the workflow learning journey. We've included a high-level version of that list below. Click the play button to the right to access the complete podcast here:

- Workflow Learning "Fixes" the Classroom
- Workflow Analysis is Crucial
- 5 Moments of Need Framework Makes the Workflow Visible
- Content Management is Back
- Methodology Begets Technology
- Workflow Learning Makes Measuring Impact Much Easier
- Don't Wait! Just Do It!
- Change Management is a Must
- COVID is an Accelerator
- Until Workflow Learning is the Intent of Our Work, It Will Be an Afterthought

CONCLUSION

We have been embedding learning in the workflow for many years. We're seeing wonderful tools that provide tailored rapid access to the full range of learning deliverables. What's unique about true workflow learning is that learning occurs while employees are actually performing the work of the organization. This workflow performance learning is the missing capability required for these changing and challenging times. It's not a replacement for all the other options we have at our fingertips, but it is a key blending partner with all event-based and workflow-embedded modalities.

We need to fearlessly take on this vital journey. We must boldly and thoughtfully move forward. As you commit to and begin to implement the 5 Moments of Need framework and extend learning into the workflow, it's important to remember the key lessons learned, best practices, and principles that have surfaced from decades of work that have been devoted to this approach.

CONCLUSION

I landed in the real world of organizational learning in 1984 with a freshly earned Ph.D. in Instructional Psychology and Technology. It was a rather abrupt landing, but it shouldn't have been. I had been wonderfully prepared to design, develop, and deliver traditional learning solutions. What became immediately clear to me, though, was that organizations need a workforce that can perform effectively - on the job, at every changing moment. I found myself unprepared to meet and measure this performance requirement. The good news is that out of this experience emerged the 5 Moments of Need framework and a performance-first shift in my own mindset. Together, these elements changed everything for me, and so began a 38-year journey of consolidating, honing, and adapting a performance-focused instructional design methodology.

Six years into this quest, my professional and personal life changed in a profoundly wonderful way. I met Bob Mosher.

We were both teaching workshops at a hotel in Dallas, Texas. Bob was teaching trainers how to train, and I was teaching technical writers and instructional designers how to write "One-Stop Documentation" (an on-the-job reference manual that was also a tutorial and a student manual for classroom training). On the second day of our workshops, we began a practice of swapping classes for 30 minutes. Bob would teach my class the principle of "Training to Independence" through an approach he called "Ramp-Up and Ramp-Down", and I would teach his trainers about the 5 Moments of Need. We have been friends and colleagues ever since. During the last decade, I have been blessed to be his business partner in an all-out effort to lift workforce learning to its rightful place: where organizations throughout the world are learning at the moments of Apply, Solve, Change, Learn New, and Learn More; where knowledge-enriched performance is the driving consideration when it comes to organizational learning; and where instructional designers know how to analyze and design for the workflow.

Organizations need workforces that are more productive and adaptive because of what learning professionals do for them. This requires us to develop, implement, measure, and constantly optimize solutions that not only enable effective performance in the flow of work at all 5 Moments of Need, but that also intentionally extend learning as deeply into the flow of work as possible. Adopting the 5 Moments of Need and workflow learning is a journey every organization needs to take and will prove to be the most professionally rewarding decision you will ever make. It most certainly has been for us.

- CONRAD GOTTFREDSON