

WHITE PAPER

# Train them less Support them more

How to Operationalize  
the 70 in 70:20:10



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A great deal of time, energy and money is spent training people to be competent to perform in their jobs. But how much of it is effective, and is there a better way for organizations to achieve their objectives through their peoples' efforts?

There is growing acceptance of a different approach to achieving competence across an organization that does not rely so heavily on training people to remember the details of their roles (Rosenberg 2005, Cross 2007, Quinn 2014, Jennings et al. 2015). Instead, it relies on the observations of people about how they actually come to know the things they need to know in order to succeed in their jobs. The observations themselves are not at all surprising. Most of us know them to be true from our own careers: most of what we need to know we learn on the job itself, from the experience of actually doing it. A supportive environment made up of managers to guide and peers to learn from also plays a role, as does the formal training we might receive along the way. But most of us attribute only a relatively minor contribution to things we learn in formal education. These observations have come to be known as the 70:20:10 framework (Jennings et al. 2015).

Charles Jennings points out that the numbers in the 70:20:10 framework are not meant to be prescriptive. It's not a model to be applied precisely, rather it is an observation-based framework for understanding how workplace learning actually occurs (Jennings et al. 2015 p. 15). The 70:20:10 framework helps us make practical sense of learning theories as we devise ways to help our people become more effective more quickly.

The most important practical conclusion to be drawn from 70:20:10 is that enabling the 70 – workplace experience – is the most effective way to improve workplace performance. Therefore, operationalizing the 70 in 70:20:10 should be a key activity for Learning and Development professionals.

At Panviva, we see our role as providing a way to enable people to perform their jobs reliably and accurately with less training and support. We achieve it through our product SupportPoint, by providing moment-of-need guidance so people don't have to remember all the details. Unburdening people from having to remember details because they are instantly and effectively available at all times has a fundamental impact on the role and content of training.

This paper describes the theoretical underpinnings for the design of SupportPoint and how Learning and Development professionals can use it to operationalize 70:20:10.

## Learning from how children teach themselves to read

The fact that preschool-aged children can learn to read is an example of the extraordinary human capacity for learning. As we look back to how we helped our own children teach themselves to read (because that is almost surely what happened; they taught themselves with the support of their teachers and families), there are several aspects of the experience that are relevant to supporting adults to learn in an organizational context.

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In a prior life, I was involved in the educational book publishing industry. My company published everything from elementary school mathematics and reading programs to university textbooks in physics and accounting. There were fierce debates between the various schools of thought in the area of infant literacy education. The whole language proponents argued for ‘real books’ and ‘language immersion’, while the ‘old school’ phonics proponents pushed for memorizing sounds, sounding out words correctly before moving on to sentences, and then paragraphs, and so on. However, common to both was the notion of ‘having a go’ at reading. I could relate this to my own experience as a parent, listening to my children reading storybooks, sounding out some words, guessing others from the context of the story or the picture on the page, or simply skipping over words they didn’t know.

Therefore the requirements for children to learn how to read include:

- attack skills that give them the self-confidence and strategies they need to try to read by themselves (initially guided but then on their own); and
- a safe environment to experiment, fail and try again.



Employees have much the same requirements:

- a process guidance system to provide the details they need but should not have to remember; and
- training in how to use it so they can be confident that they will be able to find the details when they need them.

Schank (2002) points out that children and employees alike learn because they have a goal that is of interest to them. While children might learn to read because they want to enjoy books more, employee goals often relate to doing their jobs better so as to advance their careers, earn more money, or simply manage their work/life balance. In an organizational sense, we want people to learn so that they can achieve the competencies needed to reliably and consistently perform their jobs. But unless the training resonates with employees’ personal goals, they are unlikely to embrace the training and learn from it. Unlike children, adults tend not to invest time in learning something ‘just for the heck of it’. We have seen this with the rise of Google. Googling has become the alternative to knowing something – why try to know something if you can instantly access it online when you need it and then forget it again? Today we expect knowledge to be ‘on demand’.

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# How do we learn?

We train employees so they will be able to remember how to respond effectively to the situations and cues they experience on the job. But is it training alone that turns an employee into a high performer?

*“When faced with a problem, the human mind assesses whether it matches one of the scriptlets stored in memory, and if so responds... When the result is not as expected, the person experiences expectation failure, which is a trigger to update the scriptlet...”*

## Scriptlets and expectation failure

Schank introduces the notions of *scriptlets* and *expectation failure* as central to understanding how adults learn and acquire skills. A scriptlet is a model of how the world, or a small part of it, works. Scriptlets are generalizations, formed through repeated experience, and stored in memory. It is similar to Senge’s (1990) notion of a *mental model*.

Often, scriptlets are buried deep in the sub-conscious mind. We don’t know what we know until faced with a situation that triggers a memory. When faced with a problem, the human mind assesses whether it matches one of the scriptlets stored in memory, and if so responds according to what the scriptlet suggests. When the result is not as expected, the person experiences expectation failure, which is a trigger to update the scriptlet to account for the failure, or create and store in memory a new scriptlet for the newly experienced situation.

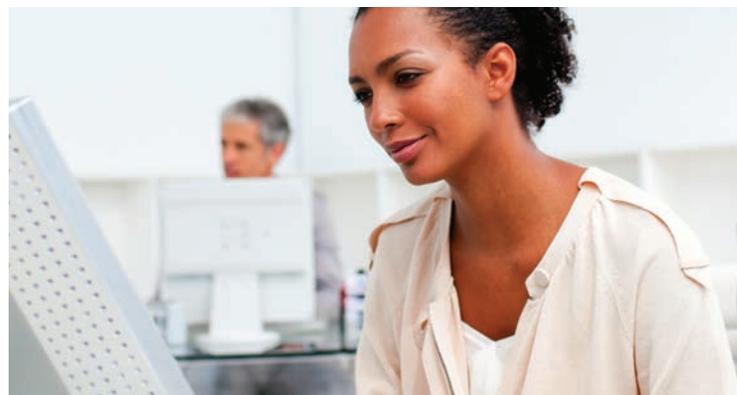
In business guidance terms, Schank’s scriptlet is like a business procedure (e.g., a procedure for creating a new customer record in the CRM) stored in a system such as SupportPoint that captures the scriptlets that exist in the memories of its most skilled and experienced workers in a way that all employees can benefit from. It is brief, action-oriented and easy to access when needed.

Once the scriptlets of the most expert workers are documented in the process system, training can focus on providing all workers with the ‘attack skills’ to find the correct scriptlets when needed and the opportunity to apply them until they, too, have become ingrained memories.

Schank provides a basis for understanding the 70 in 70:20:10. Trying to solve a work-based problem based on a scriptlet stored in memory, possibly failing, and updating the scriptlet based on the experience explains why people tend to attribute the job itself as the most important learning milieu.

## The power of practice and reflection

David Kolb’s work on experiential learning in the 1970s and 1980s (Kolb 2014) offers a similar and supporting view, but from a different perspective. While the most-often referenced aspect of Kolb’s work may be his reference to specific learning styles, at its core Kolb’s work introduces the idea that learning happens while doing, and so is strongly supportive of the observations that form the 70:20:10 framework. Many have argued that Kolb’s model for experiential learning is too prescriptive in its promotion of a learning sequence and preferred learning styles to be meaningful in an organizational learning sphere. This, however, ignores the core understanding that learning happens through the act of doing, is enhanced by access to concepts, and is reinforced by reflection on the experience. To recognize failure of expectation requires some level of reflection, and so Schank and Kolb each seem to be broadly supportive of the 70:20:10 framework without actually prescribing it as a rule.



## From learning to knowledge management

In her seminal work that coined the term *Electronic Performance Support System* or EPSS, Gloria Gery (1991) identified that adults learn best by doing things, because at the moment they *need* to do something, they naturally have a heightened interest in the task at hand, the situation and the related concepts. ‘Providing resources at the moment of need to learn is among the highest leverage activities that can be employed’ (Gery 1991 p. 20). Further, she points out that ‘in order to become skilled or proficient at anything, people must have sufficient practice in actually doing the task ... knowledge without practice rarely, if ever, translates into skill or specific behavior’ 55(Gery 1991 p. 21).

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If Gloria Gery were writing her book today, she might rewrite the sentence above as follows (emphasis mine): ‘Providing resources at the moment of *need* to **perform** is among the highest leverage activities that can be employed.’

## Taking some of the memory out of the job

Relying on human memory is risky. Memories fail, and the very process by which Schank proposes that memories are formed introduces a natural process of trial and error, that in many work environments can be simply too risky or even catastrophic. Yet competence or mastery of a task or concept relies on memory. Organizations need a ‘safe’ way to enable the development of competence through the development of reliable memories of their workers, which Schank tells us happens best by practicing on the job.

Training courses such as those included in most employee induction programs focus on fast-tracking the development of memory. But as Gery and many others have pointed out, training that occurs outside the normal performance situation is sub-optimal and lacks the opportunity for expectation failure that Schank posits. And the volume of activities that such induction programs try to cover burdens new starters with an unacceptably high “cognitive load” – so they promptly forget the bulk of the content presented. Learning and Development professionals need an alternative to the previous emphasis on formal training – and this is where the 70:20:10 framework provides a way forward.

If adults learn best by doing and memories are formed by trying, failing and adjusting, then it follows that the sooner employees are at their jobs, the sooner they are on the path to achieving competence. But expectation failure introduces risk that may not be acceptable in a work environment, and that is where performance support comes in.

A Knowledge Management for Productivity system is an online system that has ‘an explicit goal of supporting work performance and thinking’ (Gery 2002a p. 472). It provides employees with the business process, procedures and product-related information they need in order to perform competently in their jobs. It provides moment-of-need support, usually context sensitive with the work itself. Its content embodies the scriptlets of the organization’s most skilled employees and it delivers them to the rest, at the moment of their performance need. With a properly implemented and populated performance support system in place, formal learning interventions can be reduced to just the critical concepts, ensuring that employees possess the ‘attack skills’ to use the performance support system when they leave the classroom and need guidance for their work tasks. The real learning can then happen as it always has, as employees complete their work following the guidance provided by the performance support system.

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## 'Accidental' learning

If memory develops from trying, failing and adjusting, and if learning happens by doing, then it follows that some of the most important learning that happens in our workplaces happens by accident. No doubt reflection enhances and embeds the experiential learning, but even without it, learning happens from the act of doing. It happens not because our employees were trying to *learn* something, but because they were trying to do something. This is essentially what the 70:20:10 framework tells us, and it is supported by the observations of Kolb and Schank and others.

This can be a challenging proposition for a Learning and Development professional because it tells us that much of the activity that L&D has historically been responsible for (designing and delivering formal learning interventions and materials) does not deliver significant value to the organization because it plays only a minor role in the development of competence.

*“Business leaders care most about the performance of their people, and few care about their learning outcomes...”*

What should a Learning and Development professional do upon realizing this? My advice is to ‘get with the 70’ of 70:20:10. Find a way to become the champion for experiential learning in your organization. While the best of learning may be accidental, it does not happen by chance. The more that L&D professionals can be part of creating those happenstance experiences, part of providing the guidance for employees to successfully *do*, the greater the value they will deliver to their organizations. To achieve this, it makes sense for L&D to be the champions of KM – to be the ones promoting KM to leaders in the business as a core strategy for improving performance. In order to remain relevant, L&D must be seen as the champions of *enabling performance* and not the drivers of *learning*. Business leaders care most about the performance of their people, and few care about their learning outcomes. L&D must focus on how the business value is created – and they can do this by using KM to operationalize the 70 in the 70:20:10 framework. This has the positive side



effect of bringing L&D closer to day-to-day operations of the businesses that they support. Rather than running classroom courses that might be experienced once a year, their work can be seen by their stakeholders every day.

We started development of the SupportPoint technology in the late 1990s, long before anyone in L&D was talking about 70:20:10. We had noticed from our consulting work that outcomes from formal training, especially in large-scale change events such as an enterprise system rollout, were very poor. The trainees simply could not remember all the details, and in many cases either the system or the employees themselves had changed before the new system go-live date. We came to the conclusion that the drill and practice provided in typical pre-go-live training was more effectively done after go-live, when employees were actually using the system. In this way, we had unwittingly hit upon the dominant principle behind 70:20:10.

*“The more that L&D professionals can be part of creating those happenstance experiences, part of providing the guidance for employees to successfully do, the greater the value they will deliver to their organizations.”*

We based the design of SupportPoint on principles first enunciated by Gloria Gery in 1991 for her (at the time) mythical performance support system as a way of guiding employees through their jobs instead of training them and simply hoping; hoping they could and would remember; hoping the things they remembered would remain true; hoping they would stay long enough to apply the things they had been taught. We believed that if we could effectively guide them, then they would learn by doing, becoming what I like to call ‘accidental learners.’ Drawing on the ideas of Schank and Kolb, we ensured that the following ideas took pride of place among the other concerns about user experience design and content management. Some the important design principles were as follows:

*“We based the design of SupportPoint on principles first enunciated by Gloria Gery in 1991 for her (at the time) mythical performance support system as a way of guiding employees through their jobs instead of training them and simply hoping.”*

## Support the job, not just the system

The performance support system must guide people through the business process without disrupting it. This means that it must be context-sensitive with the multiple systems employees might need to perform their jobs, as well as with the non-system parts of the job. In this way it becomes the one place employees automatically go for assistance and learning.

## Enable reflection

One of the four phases of Kolb’s Experiential Learning Cycle is Reflective Observation. Reflecting on an experience is critical to learning from it. We introduced reflection by enabling users to add their own notes on the content – to rate it and to send feedback directly to the content owner – and we have plans to build on this by adding richer collaboration.

## Provide role-based filtering

We observed that the more comprehensive the search engine, the more search results a user needs to sift through. So we designed a role-based permission system that easily allows content owners to determine which users could access a particular piece of content so that there are fewer and more relevant search results – speeding the user’s path to the information they need at that moment.

## Support the 10 while doing the 70

We supported formal learning at the moment of performance need by making it easy for content owners to embed assessment questions directly within the performance support content and enabling tracking of end users’ learning by scoring and reporting on their progress through the formal learning content.



There's a wise old saying that 'there's nothing new under the sun,' and it is probably true of the Learning and Development field. While theories and frameworks go in and out of favor, humans go on learning in much the same way they always have, even though what and where they learn is constantly changing. And so it should not come as a surprise that Gloria Gery's observation in 1991 that humans learn best by doing still holds true today, and that it finds resonance in the work of more contemporary researchers such as Robert Schank and David Kolb, or that that all three are consistent with the observations that lead to the 70:20:10 framework.

**“To successfully implement 70:20:10 you must first implement the 70 and work from there towards 100% performance.”**

Charles Jennings

What is perhaps surprising is that progress in applying these ideas by operationalizing the 70 in the 70:20:10 framework has been so slow. But progress is now being made, with leaders such as Charles Jennings bringing forward comprehensive implementation methodologies to guide Learning and Development professionals in this quest .

As Charles Jennings says, 'To successfully implement 70:20:10 you must first implement the 70 and work from there towards 100% performance.' SupportPoint provides a tool for doing just that.

## References

- Cross, J. (2007). *Informal learning: rediscovering the natural pathways that inspire innovation and performance*. San Francisco, California: Pfeiffer
- Gery, G. J. (1991). *Electronic performance support systems: How and why to remake the workplace through strategic application of technology*. Tolland: Gery Performance Press
- Gery, G. J. (2002a). 'Achieving performance and learning through performance-centered systems' in *Advances in developing human resources* Volume 4 No. 4, November
- Gery, G. J. (2002b). *One on One with Gloria Gery in Cappuccino: The e-Newsletter for Change, Learning and Performance* (Deloitte Consulting). Issue 4, October-November.
- Jennings, et al. (2015). *702010 : towards 100% performance*. Maastricht: Sutler Media.
- Kolb, D. (2014). *Experiential learning: experience as the source of learning and development*, second edition. Upper Saddle River, New Jersey: Pearson Education Ltd
- Quinn, C. (2014). *Revolutionize learning & development: performance and innovation strategy for the information age*. San Francisco, California: Wiley
- Rosenberg, M. (2005). *Beyond E-Learning: Approaches and Technologies to Enhance Organizational Knowledge, Learning, and Performance*. San Francisco, California: Pfeiffer
- Senge, P. M. (1990). *The Fifth Discipline*. New York: Doubleday
- Schank, R. C. (2002). *Designing world-class e-Learning*. New York: McGraw-Hill

Panviva is the developer of SupportPoint, a powerful knowledge management for productivity tool that gives employees one-click access to information specific to their role – and the directions they need to complete any task to expert standards, right from the start. This just-in-time guidance from SupportPoint improves accuracy, compliance and customer experience – while dramatically reducing training time and costs. Over 100,000 users around the world at leading financial services, insurance and utility companies, as well as government agencies, use SupportPoint – and customers typically report performance benefits and savings within weeks, with Return On Investment (ROI) achieved in months.



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