



PERFORMANCE BEYOND THE SKILLS OBSESSION

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do that others don't**

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What high performing organisations do that others don't

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Abstract

Skills are important. Without the right skills applied in the right way tasks cannot be completed correctly. We only need to observe elite sportswomen and sportsmen to grasp that fact. However, skills alone are not enough to win on the sporting field or to deliver high performance in any other field. High performance is a product of an entire ecosystem including, critically, a psychologically safe environment where individual skills may be a part but are rarely the main or the most important component of the system.

This discussion paper examines the opportunities and approaches that are available and in use to build and maintain high performing teams and organisations beyond skills and beyond traditional training. It looks at the roles played by work design, clarity of process and purpose, psychological safety, effective leadership, and other factors driving cultures of continuous improvement and high performance.

Keywords: performance, work processes, physical, safety, psychological safety, skills

1. Introduction

Learning is a process. Performance is its output.

Improving individual, team, and organisational performance is all about making a combination of changes in both behaviours and in the systems that impact task completion. Improvement of both is the route to increased levels of performance for the individual, a team, and the organisation as a whole. Focus on one only, and results are likely to be sub-optimal.

Changes in performance are the output of learning at a number of levels. Eric Kandel, neuroscientist and Nobel Prize winner for his work on learning and memory, describes learning as *the ability to acquire new ideas from experience and retain them as memories*.¹ These new memories result in behaviour change and, in the right environment, lead to changes in the way tasks are completed and performance is achieved. If performance is to improve, learning is one of the factors which can drive that improvement, but learning isn't the only factor.

Optimisation of the environment where work is carried out is an equally important, and often more important, factor in delivering improved performance. Changes in the operating

environment are brought about by a combination of factors including improvements in systems and processes, adequacy of tools, availability of guidance and so on.

High performing organisations spread their focus across a range of levers in their efforts to achieve continuous improvement. They embed systems thinking in everything they do. They understand the need for agility. They build shared visions and purpose. They learn from mistakes. And they know that learning from experiences - both positive and negative - is essential to achieve and retain high levels of performance. They understand high performance is more than knowledge and skills.

'You don't win a Grand Slam tennis competition just by learning shot selection theory' Ted Gannan. CEO. Panviva

¹ Kandel. E.R., The molecular biology of memory storage: a dialog between genes and synapses. Nobel Lecture, December 2000

2. Learning from working

Kandel's definition of 'learning' as the ability to acquire new ideas from experience and retain them as memories which, in turn, leads to different (and better) behavioural responses in future situations, is reflected in other fields of research.

Economists have drawn similar conclusions. Kenneth Arrow the eminent US Nobel Laureate in Economics observed in his paper 'The economic implications of learning by doing' that:

*'In the process of producing and investing, one learns. As we produce and invest, we get better at what we do. If one builds more ships, one gets better at ship building. Productivity increases.'*²

Arrow also observes the criticality of learning by doing in his statement:

*'... one empirical generalization is so clear that all schools of thought must accept it: Learning is the product of experience. Learning can only take place through the attempt to solve a problem and therefore only takes place during activity.'*³

The role of experience in learning is a fundamental factor that often escapes many HR and Learning professionals. Learning is not memorising. Learning is not consuming content. Learning is not pre- and post-testing. Learning comes from rich and challenging experiences in the context of working and operating environments and is only demonstrated by behaviour change and performance improvement in action.

The increasing volume and decreasing half-life of most information over the past 50 years has highlighted the need to learn from experience and has called into question the formal training model that educators have used for more than two thousand years - that of helping people turn information into knowledge, knowledge into skills, and skills into capability.

Skill and capability without experience can easily be found wanting. Sporting coaches have known this for years. The concept of 'match fitness' and its importance for delivering high performance is a universal one.

*'You can learn to row by racing, but you will never learn to race by rowing.'*⁴

One of the challenges facing the traditional training and development model is that if both the raw material and the intended environment are constantly changing then the end-product of traditionally static formal education processes is often unfit for purpose beyond basic competence or 'licence to operate'.

3. The system

W. Edwards Deming, the American engineer and statistician who played a key role in the reconstruction of Japanese industry post-World War II is credited as a founder of the total quality management approach. Deming's prime focus was on the 'system'. His approach is grounded in systems theory and based on the principle that each organisation, no matter how large or small, or whether for-profit or non-profit, is built around a system of interrelated processes and people⁵.

At various points in his career Deming reviewed the nature of the performance problems he encountered. Towards the end of his working life, he reflected that:

*'I should estimate that in my experience most organizational performance problems and most possibilities for improvement add up to the proportions something like this: 94% belongs to the system (responsibility of management); 6% special (the performer).'*⁶

In Deming's 'system', the process definitions and process execution are carried out through the actions of the workforce. His definition of a system is:

*'a network of interdependent components that work together to try to accomplish the aim of the system. The aim for any system should be that everybody gains, not one part of the system at the expense of any other'*⁷

In other words, the performers are involved in process development and continuous improvement. His view that the major cause of organisational performance problems and opportunities lie with management reflect traditional top-down structures and approaches. In organisations where higher levels of collaboration, innovation, and shared decision-making exist the ratios might be quite different. Deming's approach to solve this problem was to suggest distributing authority across the workforce and empower workers to design their own processes and systems.

² Arrow. K. *The economic implications of learning by doing*. In the Review of Economic Studies (Oxford Journals) 29 (3): 155–173

³ *ibid*

⁴ Fairburn. S. *On Rowing: notes by Steve Fairbairn*; Nicholas Kaye, London, 1951. (Fairburn was an influential rowing coach and writer on high performance in the early 20th century).

⁵ Petersen, P.B. (1999), *Total quality management and the Deming approach to quality management*, Journal of Management History (Archive), Vol. 5 No. 8, pp. 468-488.
<https://doi.org/10.1108/13552529910290520>

⁶ W. Edwards Deming. *Out of the Crisis*. 1982. MIT Press. page 315

⁷ *ibid*

4. Work as described. Work as performed

The ‘work-as-described versus work-as-performed’ or ‘work-as-imagined versus work-as-done’ conflict has been documented by researchers such as Hollnagel, Wears, and Braithwaite⁸ when exploring safe practices and the importance of workers adjusting to specific conditions of work and changing environments, specifically in healthcare settings.

‘Work-as-imagined describes what should happen under normal working conditions. Work-as-done, on the other hand. Describes what actually happens, how work unfolds over time in complex contexts.’⁹

In other words, work as described and work as performed are often two different things.

In their analysis, Hollnagel, Wears, and Braithwaite recommend safety management (and, it could be argued, the management of any performance improvement process) should move from focusing on ensuring ‘as few things as possible go wrong’ to learning from what goes right and then design solutions that take both into account.

In an ideal world, good and ‘exemplary’ working practices can be analysed and from that analysis the skills, processes, and tools required to carry out those practices can be defined.

The common practice for learning and development (L&D) professionals is to rely on operating manuals, standard operating procedures (SOPs), and first level manager input to provide descriptions of the work that needs to be done to achieve the desired outputs and what ‘good’ looks like in terms of individual performers. Often, individual subject matter experts (SMEs) involved in carrying out the work are interviewed to gather more ‘on the ground’ information.

The weakness in this approach is that the work as described in operating manuals and SOPs, by first level managers, and even by SMEs usually does not describe how the work is, in fact, carried out. SOPs are often out-of-date or describe idealised rather than highly contextualised situations. First level managers are often not directly involved in the day-to-day execution of the tasks and subsequently are at an arm’s length of the work as performed. SMEs are often reluctant to describe where they deviate from defined operating procedures, and the reasons they do so, or are simply not

aware of the fact that their practice has ‘drifted’ from codified standards. Shortcuts and improvements resulting from experience and practice are not identified for fear of ‘not following instructions’ or not adhering slavishly to regulated procedures. In other words, the work as described and the work as performed are often quite different.

This gap between work as described and work as performed is compounded when L&D professionals build training programmes based on data which describes an idealised situation and does not necessarily reflect current good practice and the results of continuous improvement.

Quite often the gap between ‘work as written and work as done’ is compounded further due to the fact that many technically proficient people are unable to articulate and transcribe to paper how they actually perform the task. At the other end of the process the often low levels of literacy of technically proficient people who need to comprehend the written procedures and re-translate the written words they are reading into actions raises another barrier.

Through adopting new and improved ways to identify, capture, analyse, and share worker tacit knowledge, we can consistently improve the execution of tasks in any environment. Psychological safety is the key component that allows the raw, truthful, and transparent conversations to take place between the workers and their management to enable this to happen.

There is a considerable history of evidence that the relationship between managers and employees is critical in delivering high performance in an efficient and safe way. Not only do managers create the conditions for safe and effective working practices but they are the prime indicator of success or failure on the job.^{10 11}

Helen Lingard, distinguished professor and director of construction work health and safety research at RMIT University in Melbourne, Australia, has investigated occupational issues around health and safety risk management from a range of perspectives extensively over many years. Lingard points out research has acknowledged social interactions among supervisors and workers shape safety

⁸ Hollnagel, E., Wears, R.L., Braithwaite, J. (2015) *From Safety-I to Safety-II: A White Paper. II: A White Paper*. The Resilient Health Care Net: Published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia. <https://www.england.nhs.uk/signuptosafety/wp-content/uploads/sites/16/2015/10/safety-1-safety-2-white-papr.pdf>

⁹ *ibid*

¹⁰ Heibutzki, R. *Manager's Influences on Employee Performance*. <http://work.chron.com/managers-influences-employee-performance-22785.html>.

¹¹ Russell, Z.A. et. al (2018) *High performance work practice implementation and employee impressions of line manager leadership*. Human Resource Management Review Volume 28, Issue 3, Sept. 2018, Pages 258-270

implementation on work sites, but her work uncovers details of the nature and impact of those social interactions.¹²

Lingard's research reveals that the gap between work as described and work as performed, particularly in relation to safe work practices, is compounded by factors such as competitive tendering and price-based selection in the construction industry where social relationships and other factors are ignored. People understand and respond to safety in different, socially contextual, ways. Simply providing SOPs and general training is not enough to provide confidence that work will be executed safely, let alone to the highest possible standard.

Safe working is often thought of as 'following the rules' and addressed in a technical context. Yet work by Lingard and by others¹³ has found that work as described, typified by SOPs and safety rules, often ignores the role played by social interaction and other factors in the typical workplace where the interplay of technology, complex processes, and human and social factors compound the issues.

The simplification of viewing workplace safety and risk mitigation as a technical problem that can be solved by technical control measures, with the cause due primarily to operator error or lack of competence, leads naturally to generic solutions that attempt to 'fix the operator' without examining and correcting systemic issues. This is seen across all industries and in governments where calls for additional compliance training is usually the reflex action following a critical compliance failure. Examples abound in legal and financial compliance¹⁴, health and safety compliance, diversity compliance (where a meta study of 829 companies over 31 years that showed diversity training overall had 'no positive effects in the average workplace.')¹⁵, and in other areas.

If we focus our learning and development efforts on preparing people to carry out work as described without considering the complex working landscape they will encounter, their specific responses in that complex landscape, and the landscape itself, then we are likely to miss vital lessons from work as performed. Workers and their work environments are intertwined. Unless we understand the ways in which the work environment impacts the ways workers carry out their

tasks (and deliver 'work as performed'), then we are unlikely to be able to support safe and effective working. As Geary Rummmler, a pioneer in the field of human performance improvement (HPI) and workplace learning said:

*'Pit a good employee against a bad system and the system will win most every time'*¹⁶

The solution to this is not simply getting to the 'right SMEs', but it involves a continuous process of engagement and observation of the 'system' of working processes. It goes without saying that today's world is more complex and faster changing than in the past. New challenges and changes in internal and external environments pose a challenge for every organisation. 'Work as performed' or 'work as done' describes what actually happens and how work unfolds over time in complex contexts. Acknowledging this dichotomy should be at the core of L&D's work.

This requires radical new thinking about learning and development approaches and processes.

5. Beyond training

Just as the requirement for training cohorts of blacksmiths disappeared almost overnight following Henry Ford's development of production-line automobile assembly, the need for training people in formal learning environments for seemingly every task in today's world is likewise disappearing.

That is not to say that training is defunct; it certainly isn't. However, we need to look very carefully at how we train people and what we use training for. We need to adopt different approaches where appropriate. The requirement for building employee capability hasn't gone away; we just need to look at different ways to solve the problem of reducing errors, ensuring safe working, and enabling high performance.

The need to look beyond training is universal, but no more critical than in knowledge-intensive environments. The challenge we have is that knowledge-intensive environments are now more common than not. Manufacturing, for example, has migrated over the past 50 years from an industry built on engineering processes to one that relies on IT systems and

¹² Lingard, H. and Oswald, D. (2020) *Safety at the Front Line: Social Negotiation of Work and Safety at the Principal Contractor–Subcontractor Interface*. American Society of Civil Engineers. DOI: 10.1061/(ASCE)CO.1943-7862.0001799

¹³ Including Gherardi and Nicolini (2000), Dekker (2003), Hale and Borys (2013), von der Heyde (2015) and others.

¹⁴ Jeff Kaplan, US lawyer and expert in compliance and ethics has studied the impact, and lack of impact, of compliance and ethics training for more than 30 years. He reports "from a deployment

perspective, training is often disconnected from risk-causing events or other contexts in which Compliance & Ethics messages could be more effectively conveyed."

¹⁵ Dobbin.F., Kalev. A., Kelly.E. *diversity management in corporate america*. in Contexts, Vol. 6, Number 4, pp 21-27. ISSN 1536-5042, electronic ISSN 1537-6052. © 2007 the American Sociological Association.

¹⁶ Rummmler. G. 'Training Skills Isn't Enough'. in Training, 1983, 20 (8) page 75-76

processes at almost every turn. These IT systems and processes are almost by definition 'knowledge-intensive'. For example, the demands of supporting IT processes are wider and deeper than previously required to support many engineering processes. Not that engineering processes were straightforward in the past (whoever looked into a car engine or onto a factory line in the 1970s and understood the workings) but that technology has added an order of magnitude of complexity to many systems and processes.

Traditional training approaches are generally inadequate in situations of complexity and change. They may offer part of the solution, but almost never the complete solution.

Optimum performance usually requires changes that extend beyond training or do not involve training at all. Training is no substitute for analysing workflows, improving processes, aligning incentives, and providing task-based support at the point-of-need. L&D professionals should look to adopt Performance-Based Learning¹⁷ and similar approaches and methodologies to develop a wider range of solutions that support accurate completion of tasks and quality work outputs.

5. The key pillars for success

There are several key pillars or principles that underpin the delivery of high performance beyond the training paradigm. Without these it is almost impossible to ensure quality, accuracy, and safety in working practices. Without these it is also almost impossible to create a culture of continuous improvement (termed a 'learning culture' in many organisations but better described in terms of output rather than input).

5.1 Performance, not learning

Everyone wants to work in a successful organisation. When we do, our levels of engagement go up, our purposes align, and we feel part of the success.

One barrier L&D needs to overcome is thinking about 'learning' without a laser-like focus on the part learning is playing in organisational success. High performance at individual, team, and organisational level requires a shift in focus from the learning paradigm, where formal learning is the

engine and outputs are seen in learning terms such as learning results, learning value, and learning impact. The shift required is a move to the performance paradigm, where organisational performance, business value, and business impact are the core focus and where learning may be part of the journey to achieve these.

If an L&D department is to create measurable business value it needs to move into the performance paradigm and focus on developing systems, processes, and solutions that are aligned with becoming a *value creator*.¹⁸

5.2 Psychological safety first

*'Psychological safety is a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes.'*¹⁹

Learning is a continuous process which mainly consists of experiences, interaction with others, and reflection. It needs to be supported and encouraged as part of all work processes and throughout the work environment.

Psychological safety is the bedrock for continuous learning and for a culture of continuous improvement. Without high levels of psychological safety, it is impossible to create a culture and embed practices of continuous improvement. Without high levels of psychological safety and trust, it is impossible to create a learning culture.

Actions involving learning behaviour through asking questions, seeking help, experimenting with unproven actions, or seeking feedback are common and almost daily occurrences in the workplace when facing change, uncertainty, or ambiguity.

These activities carry a risk for the individual or team as being seen as ignorant or incompetent.²⁰ Accommodation of these risks and using the outcomes for learning themselves, is a good indication of the level of psychological safety within an organisation.

Outside of the narrow learning perspective, there are many positive business benefits for an organisation and workforce that know how to create a psychologically safe environment

¹⁷ Arets, J., Jennings, C., Heijnen, V. (2016) *Performance-Based Learning roles and tasks in 70:20:10 Towards 100 Percent Performance*. Sutler Media. ISBN 978-90-823978-3-3

¹⁸ Arets, J. (2017) *New Value Creation with Four Business Models for L&D*. <https://702010institute.com/project/new-value-creation-with-four-business-models-for-l-d/>

¹⁹ Edmondson, A., Nembrand, I. (2012) *Psychological Safety: A Foundation for Speaking Up, Collaboration, and Experimentation in*

Organizations. The Oxford Handbook of Positive Organizational Scholarship

²⁰ Edmondson, A. (1999). "Psychological safety and learning behavior in work teams." *Administrative Science Quarterly* 44: 350-383. and West, M.A. (2000). *Reflexivity, Revolution, and Innovation in Work Teams*. In *Advances in Interdisciplinary Studies of Work Teams*, Vol. 5, 1-29. Greenwich: JAI Press.

and, with that in mind, the learning, development, tools, and support that is required for their team leaders who ultimately either underpin or undermine the development of a both psychologically safe and high performing environment. Psychological safety directly and indirectly impacts productivity right through to individuals' state of mental health or ill health, which, as a result of the Covid epidemic, is a primary focus across the globe right across all workplace environments and industry sectors.

5.3 Co-creation is critical

In many organisations L&D has become separated from the core business operations. This is overwhelmingly a result of the L&D function being part of the human resources (HR) function.

By its nature and remit, HR's principal focus is on individual employees from recruitment, to onboarding, to workforce development, succession planning, and throughout the employment cycle. HR's role includes performance management and talent identification, remuneration, career progression and exit. As a result, L&D is trapped into servicing individual needs as its primary role and the relationships with key business stakeholders are often at arm's length, intermediated by HR business partners. This is exemplified, firstly, in significant L&D resource allocation to developing competency and skills frameworks, onboarding, compliance and management training, and formal learning programmes generally and, secondly, in making relationships with key stakeholders more difficult and with less likelihood of building trust and embedding co-creation approaches when defining and developing learning and performance solutions.

Of course, some L&D functions sit within the organisational units they service. This makes the relationship with key stakeholders more straightforward and co-creation of solutions more likely, but the pull from the vortex of a centralised HR function can often be overwhelming.

5.4 Beyond formal training

Formal training is sometimes necessary but alone is never enough.

The step beyond formal learning solutions is a large one for many L&D teams. Not only are most L&D professionals rooted in formal learning design and approaches, but a lack of performance consulting capabilities (to identify the real causes of under-performance), systemic design capabilities (to co-create solutions that address factors other than individual

knowledge and skill deficiencies), and effective data and business improvement analysis capability. These challenges make the step beyond formal training a difficult one.

However, the step beyond formal learning is an essential one for L&D teams to make if their solutions are to contribute value to organisational, team, and individual performance improvement. Studies find that much of the performance of workers is driven by learning by doing or learning from peers or supervisors in the workplace.²¹ L&D needs to embrace these learning opportunities and incorporate them in solutions.

There is no doubt there are opportunities to exploit informal and work-based learning in every work environment. However, in more trades-based environments, where work is predominantly achieved by manual labour, informal learning approaches are often found to be far more beneficial to the individual and organisation than formal training.

This form of learning also caters for the growing number of workers in the transient, labour hire, agency, and short-term contract workforce.

There are three factors we need to consider as we look to equip and empower our modern transient workforce and set them up for success. These are [a] repetition and ongoing access to L&D resources through improved commercial modelling, [b] meaningful, rich-media content, and [c] optimum learning environments through on-the-job mobile access embedded in the flow of work.²²

²¹ De Grip, A., Marconi, G. (2014) *Education and growth with learning by doing*. Research Centre for Education and the Labour Market. Maastricht University.

²² Lingard, H., Edirisinghe, R., Harley, J., Broadhurst, D. (2015) *Utilising workers' tacit health and safety knowledge to produce inherently safer work processes: An evaluation of the CODESAFE system*. COBRA 2015 conference. University of Technology, Sydney, Australia.