

CURIOSITY AND COURAGE

Dr Martha Acosta, renowned author and consultant in human and organisational performance improvement, talks to Fiona Ramsay about her six key practices for effective safety leadership

“Safety enables courage,” states Dr Martha Acosta in the opening introduction to her book, *Safety Capacity: Leadership Practices for Failing Safely*, going on to explain that safety leaders enable adventurous, driven and curious people to achieve innovation and advances in healthcare, engineering and technology.

Martha reveals, through the lens of organisational learning and development, what safety capacity is and how it allows an organisation to deal constructively with the unexpected, unintended or unwanted.

Martha refers to the *Challenger* and *Columbia* space shuttle disasters, highlighting that O-ring erosion and foam loss were well-known failures to engineers working on shuttle launches which, until the *Challenger* and *Columbia* incidents in 1986 and 2003 respectively, had been largely ignored. She describes the incidents as the “disastrous outcome of many failures, some directly causal, others indirect, some barely consequential”.

Failure need not have a bad outcome, says Martha, but: “Without a change in mindset, we only notice failure when it hurts.”

She cautions against a fear of failure that discourages safety leaders from innovation and being curious but, rather, asks that we become aware of everyday failure. “Safety capacity is the extent to which organisations, their operations and their people can absorb the destructive and constructive consequences of failure.”

She relates her approach to safety capacity to human performance, Safety II and human and organisational performance (HOP), which she describes as a “shift in safety thinking” that she has participated in since leading the training team for nuclear facilities at Los Alamos National Laboratory.

Martha began her career in the 1990s in Silicon Valley, helping fast-growing technology companies build the sales and support capacity needed to commercialise their solutions in the burgeoning online world. Later, she led the design and delivery of global leadership training programmes for a division of News International.

She lived in the UK for four years but grew up in the Southwestern United States and returned to New Mexico – “seen by some as the last bastion of the Wild West” – as her British husband, a physicist, was interested in career possibilities from the local research institutions, Los Alamos National Laboratory and the Santa Fe Institute.

Martha was hired at the Los Alamos National Laboratory by Todd Conklin, who has similarly gone on to become a renowned expert in human and organisational performance, as part of a team to implement corrective actions in response to safety concerns, particularly after a major incident that led to the facility’s shutdown.

It was a “challenging project because they had turned training into punishment and I knew, as a training professional, that training didn’t fix everything,” admits Martha. The boss Pete Nanos’s apoplectic outbursts were “epic”. “Certainly, there were major safety and security concerns, but the root of the issue was weakness in organisational and operational capacity exacerbated by a deteriorating physical plant. Pete, who called everyone ‘buttheads and cowboys’ and thought he could punish people into improving safety, didn’t see it that way.”

It was all good experience to later add into her book, in which Martha explains that if Nanos had better emotional awareness, he could have been curious about problems and their potential solutions, rather than rashly moving to punishment and humiliation of the team.

After leaving the lab, she earned her Doctorate in Human and Organisational Learning from George Washington University and began consulting for Harvard Business Publishing (a subsidiary of Harvard Business School) to design and facilitate leadership development programmes for global companies like Mars and Intel, drawing upon expertise from Harvard’s executive education and MBA programmes.

An opera fan, Martha enjoys the opera festival that takes place in Santa Fe over the summer. She also serves as Board Secretary of the Los Alamos National Laboratory Foundation, supporting young people in early education all the way through going to college. “We have such diversity in northern New Mexico and there was a lawsuit, Yazzie/Martinez v. State of New Mexico, which



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challenged the state's failure to provide students – especially low-income, Native American, English language learner and students with disabilities – with an effective public education. It's the largest educational foundation in New Mexico, so that's really a wonderful thing.”

Martha is also a Trustee of her undergraduate alma mater, St John's College, which focuses on reading original texts and developing true critical thinking through close reading of philosophy, literature, maths and sciences.

ENGINEERS OF MEANING

In her book, Martha draws on the knowledge of the HOP Hub Consortium, of which she is a member, as well as from her work with Harvard thought leaders, including Amy Edmondson and Linda Hill.

“The fundamental principle for the book and what I'm doing in safety is that leadership is an important system in an organisation. It's key to ensuring an organisation's capacity to identify risks and create barriers and controls. It is an often misunderstood mechanism of the organisation that needs to be honed for any kind of safety initiative to work.

“Amy made a huge contribution in getting the world to recognise the importance of psychological safety, but I still work with companies on that and they still do not get it. They still struggle with fully understanding how important the leader role is in that and how it fundamentally challenges stereotypes of leadership,” says Martha.

“Someone once said that organisations are just systems of meaning – the only reason people do anything is because it's meaningful, the bricks and mortar aren't holding together things. The procedures are only followed if they're meaningful and that meaning shifts. The system engineers of meaning in an organisation are the leaders.

“Many leaders believe their job is to just have the answers and make decisions. If they are operating in a world where all that matters is power dynamics and whether their project going to be funded and whether they are going to make it to CEO level, then curiosity is removed. Leadership requires you to look at parts of your organisation with a beginner's mindset – to allow other people to contradict you, to be curious about things that go wrong. I think that's one of the things that we need to start focusing on more.”

Within the book, Martha poses a number of safety capacity reflection questions for the reader and asks us to consider what the mark of a leader is.

She explains that safety initiatives can change the culture in an organisation, shifting it from a blame culture to one focused on the safety of all employees. She gives the example of a shared sense of purpose changing the masculine hierarchy on an oil-drilling platform into an ethos of ensuring everyone's wellbeing.

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“Humans naturally favour the wellbeing of the group over the protection of the ego,” she claims, pointing to US natural scientist Edward Osborne Wilson, who believed that humans are eusocial – evolving to adapt to their environment by changes in their social structures rather than through change in individual organisms – a major innovation in the history of life.

SHARED PURPOSE

“The most powerful motivation for cooperation is shared purpose,” explains Martha. She says that purpose brings diverse roles and procedures together and helps workers make better decisions.

She asks us to consider a busy hospital with pressure to turn over beds quickly. “There was a checklist for orderlies and janitors, which included changing out supplies, equipment and sheets and mopping the floor. Although the checklists were completed, the incidence of infection was on the rise. As it turns out, supply chain strains meant that certain cleaning products were in short supply. As far as the janitorial staff understood, their job was to complete certain tasks as quickly as possible. Without a shared sense of purpose with the medical professionals, they didn’t see certain conditions for those tasks, such as adding a sufficient amount of disinfectant to the mop water, as important as touching every corner of the room with the mop. Many didn’t feel their lack of adequate supplies was important, so they didn’t raise the issue.”

Martha says that leaders must regularly articulate their shared purpose but cautions that it is “not the same as strategy – it is about the shared *why*”.

By uncovering and communicating a shared purpose, leaders can build safety capacity by responding to strategic pressures, such as supply chain issues, or addressing operational disruptions, such as a change of operating environment, or managing a dispute between teams.

In the case of acquiring a business, for example, a leader might find challenges through a different location or ways of working. The leader must build trust quickly by finding shared purpose, communicating it and reiterating it. In *Safety Capacity*, Martha provides advice on identifying shared purpose, such as by capturing the interests of your primary audiences and getting feedback, which requires consistency and discipline.

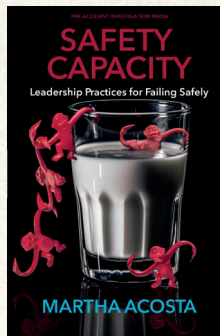
Key for safety leaders is relationship building and curiosity. The ‘Miracle on the Hudson’ incident involved US Airways Flight 1549, a regularly scheduled US Airways flight

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Failures before the Challenger and Columbia incidents had been largely ignored



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from LaGuardia Airport to Charlotte and Seattle. In January 2009, the flight struck a flock of birds shortly after take-off and lost all engine power.

Given their position in relation to the available airports and their low altitude, the pilots decided to glide the plane to ditching on the Hudson River, with no fatalities. In this case, says Martha: “The safety capacity to recover from the failure existed within the city’s incident management system.” A cooperative organisational network meant that the US Coast Guard, firefighters, police and other agencies were quickly on the scene.

Effective safety management requires an organisation to nurture people with all sorts of skills. Martha explains that most leaders spend time maintaining vertical relationships with those they line-manage and report to but that horizontal relationships matter as much, or even more.

Building safety capacity requires a network of strong relationships. “Leaders frame the problems workers must solve and facilitate the decisions that need to be made,” she says, asking leaders to consider the gaps in their organisation which may require sponsorship or mentorship relationships. “If someone believes you have their best interest at heart, they will trust you,” says Martha.

YES, AND...

Later in the book, Martha asks us to consider that learning might be more important than



getting everything right. She describes the NHS's 2016 response to the 2013 Francis Inquiry, with the Healthcare Safety Investigation Branch measuring the level of openness among hospital staff. Researchers found a mere one-point increase in the standardised openness score among hospital staff was associated with a 6.48 per cent reduction in hospital mortality rates. Martha explains that viewing errors as normal is one of the principals of HOP, describing openness as a “yes, and” mindset. “Openness creates the capacity to recover from failure by raising awareness of opportunities to improve.”

One of Martha's examples of improvisation to recover from failure is the Mann Gulch fire of 1949. Wag Dodge and his crew aimed to dig trenches to control a forest fire in Montana. High winds quickly blew the fire out of control and blocked the team's escape route to the river. Dodge lit a fire in a small area to clear a space free of fuel to shelter until the fire passed, a lifesaving practice which has since become known as an 'escape fire'.

According to Martha: “Safety has been relying on ‘no, don’t’ instead of ‘yes, and’ for too long.” Organisations are reluctant to encourage this new mindset, fearing inefficiency, mistakes

and poor performance. However, she explains that applying knowledge and learning can produce something different and enhanced. “Improvisation doesn't mean being unprepared.”

Leaders should encourage continuous curiosity to counter our human tendencies to normalise hazards, change and drift in practices. Let employees learn, problem-solve and think, urges Martha, which will develop an inquiry mindset and help cultivate curiosity about the unexpected, future threats and opportunities and adjacent technologies. Encourage teams to ask questions rather than reinforce procedures and provide solutions, she says.

Vital to this, says Martha is that psychological safety can never be assumed and must “always be rekindled and fostered in any group interaction” to ensure that everyone feels included. “Getting the information leaders need requires creating a psychologically safe environment, which builds learning and problem-solving capacity at the psychological level.”

Martha also suggests integrating critical thinking techniques into problem-solving processes, challenging assumptions to address multiple risks and concerns.

Martha concludes by stating: “There are no born leaders, just people who practice leadership regularly.” She explains that leadership is an important safety system that influences all levels of the organisation.

“What I have outlined in the book aren't solutions, they are practices. Capacity must be continuously built and maintained, because it must continuously respond to changing conditions, emerging hazards and other unknowns.”

Safety capacity not only allows an organisation to avoid catastrophe, it enables the organisation to learn, innovate and thrive. ♥

MARTHA'S SIX LEADERSHIP PRACTICES

1

Identifying and communicating a shared purpose

Cultivating a network of meaningful relationships

2

3

Fostering openness and curiosity

4

Driving critical thinking

5

Experimenting

Developing the emotional resilience to be vulnerable

6

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A smokejumper foreman, Wag Dodge, survived the Mann Gulch Fire in Montana through improvisation

