FROM BLAME TO LEARNING

A Case Study in Changing Safety Culture

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Over 4 years (2017 to 2021), the authors worked with the safety and health department at a mid-sized U.S. utility to transform its safety culture from one that placed blame on workers for errors to one of learning through mishaps. By the time the engagement concluded, the team saw measurable improvements.

Employee and manager perception that the company was moving from fault-finding to fact-finding when it investigates safety incidents rose by nearly 13 percentage points. The perception that it was OK to bring bad news to the boss without getting punished rose by 7 percentage points. The belief that the company was communicating safety lessons learned from incidents across the organization increased by 4.5 percentage points. Moreover, managers and supervisors said they saw the value of the change and affirmed that making the change was part of their jobs.

The project moved perceptions of the company's safety culture and the behavior of workers and managers alike, including the layer of management sometimes described as the "frozen middle" due to a propensity to resist organizational change (Byrne, 2005; Percy, 2023). To achieve these results, the project team:

- 1) coached senior leaders to be the faces of the change and made them the principal teachers of the change initiative,
- 2) transformed middle managers and supervisors into both learners and teachers,
- 3) used in-person communications to reach field workers, where digital communications had failed,
- 4) deployed quantitative and qualitative research frequently to measure progress and make mid-course adjustments, and
- 5) reframed crucial elements of the safety culture's language across the utility's businesses.

Background

At the time the project was undertaken, the utility had approximately 5,500 employees in its operating companies. Nearly 60% of employees were field workers and half belonged to a union. About 20% had 4 years' experience or less with the company. Another 20% had 30 years' experience or more with the company. More than 60% were age 45 or older, while 18% were between age 18 and 35.

The company's employees, especially field employees, were exposed to risks typical of the gas and electric utility industry (Urbint, n.d.a) including falling from

heights, encountering fires from sustained fuel sources such as natural gas lines, and being pulled or gripped by heavy rotating equipment such as chain saws and pulleys. Other hazards included being struck by mobile equipment such as loaders and backhoes, motor vehicle incidents as the operator or passenger, being struck by a load of equipment or materials suspended overhead, natural gas explosions from compromised gas lines, electrical arc flashes, and direct contact with an electrical source such as a high-voltage overhead line.

The previous safety culture could be described as "blame, shame, retrain," where the term "culture" refers to "shared and fundamental beliefs, normative values, and related social practices of a group that are so widely accepted that they are implicit and no longer scrutinized" (Shanafelt et al., 2019). In this blame-focused safety culture, employee mistakes were usually assumed to be the cause of safety incidents. Operating on that assumption, managers blamed and shamed individual employees for those mistakes, then disciplined and retrained them.

The blame culture exacerbated long-standing tensions and distrust between management and the unionized workforce. It also encouraged employees to shield their work performance from managers if possible. Employees were more likely not to report a safety incident unless it was so significant that it could not be hidden from management. When employees did report incidents, they provided only minimal details. If the incident was then investigated, the investigation was treated like a criminal case. Investigators collected statements from those involved in the incident, and they were asked to account for their behaviors. At that time, the utility made up about onethird of its parent company's business yet accounted for 75% of all lost-time incidents.

Inspired by the safety ideas of Dekker (2014) and Conklin (2012) as well as the principles of human and organizational performance (HOP; Team Safesite, 2021), the safety and health team determined that the company must shift away from a culture of blame to one of learning and improving to make the company safer for

employees. In a culture of learning and improving, managers and employees treat safety incidents as opportunities to learn how to better safeguard employees and prevent future harm. The team envisioned a safety culture grounded in six core beliefs, adapted from HOP (Conklin, 2019):

- •Everyone is fallible; even our best employees make mistakes.
- •Employees come to work to do a good job, and mistakes will be made.
- •In a learning culture, we accept that mistakes happen and build system defenses around error-likely situations.
- •Even if a person does make a mistake, they will not be punished for it.
- •A learning and improving safety culture also accepts and learns from failure.
- •People are the solution that we want to harness; they are not the problem that needs to be controlled.

The safety and health team wanted the learning culture to be forward-looking, focused on having employees identify hazards before they became a problem. In a learning culture, when employees see something amiss, they say something, then fix something. Managers use employee reports of incidents and near-misses as opportunities to teach and be proactive, setting up defenses to prevent incidents. In this nonpunitive culture, workers are free to contribute what they know about actual operations so that workers and managers can collaborate to develop safeguards for their daily work to prevent or mitigate future safety incidents.

Method One: Senior Leaders as the Face of Change

The first of five primary methods used to achieve understanding and adoption of the new culture was to engage senior leaders actively and visibly as part of the change program. They became the face of the change. To enable these leaders to achieve this role, the safety and health team started by educating senior leaders in the HOP principles that underlie a learning and improving culture. The team conducted the training in sessions designed for only senior leaders, which provided the leaders a safe space to process

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the change and consult with their peers about what it meant for all of them.

The training was also an opportunity to build trust between the safety and health team and the senior leaders. It was a shared event that showed the senior leaders that the safety and health team could act as mentors and trusted advisors for them, providing these leaders with a judgment-free place to discuss their concerns and challenges as they applied the new principles.

Next, senior leaders, including divisional CEOs and, later, business sector leaders, were asked to lead the training sessions for supervisors and managers in how to use monthly discussion guides on elements of the culture change. The supervisors then used those guides to communicate with their teams. The senior leaders were coached in this role by members of the safety and health team. This in-person cascade from senior leaders to managers and supervisors and finally to teams, using a common discussion guide, was known as a "meeting in a box" (detailed in the "Method Three" section). Because the cascade started at the senior level of the organization, it made clear to managers and the workforce that the culture change was a management priority.

In the third year of the program, the project team saw that the senior leaders making direct contact with their managers and supervisors was effective. This led the project team to ask those leaders to facilitate focus groups (dubbed a "listening tour," detailed in the "Method Four" section) following the program's second survey. This enhanced the senior leaders' role as the face of the change. Normally, the project team conducted focus groups with an outside facilitator. But the team believed that this departure from the standard practice would improve engagement from both employees and leaders. Leaders would have direct, unfiltered experiences with their own frontline supervisors and managers. Managers and supervisors would witness and participate in this unusual engagement of their leaders in the culture change, then communicate what they experienced to their peers.

Method Two: Middle Management, Supervisors as Learners & Teachers

The second method for ensuring the adoption of the new safety culture was to turn middle managers and supervisors into learners and teachers. Initially, the project team conducted voluntary training for managers and supervisors in the principles of HOP using classroom and virtual learning. It quickly became clear that this

method would not reach the entire audience of managers and supervisors. Instead, the project team used the meeting-in-a-box method monthly, not only as a communications tool but also as a teaching tool. In this approach, senior leaders taught monthly HOP lessons to middle managers and supervisors, who then taught the lessons to their own teams.

The project team learned that, based on how the middle managers and supervisors handled these monthly learning meetings with their teams, there was indeed a "frozen middle" problem at the utility. The project team asked managers and supervisors to provide brief reports on how their teams responded to the meetings using an existing action-tracking tool. In the first quarter that managers and supervisors used the meeting-in-a-box method, nearly half (47%) did not make any report at all. Within a year, the level of engagement had dramatically increased.

Part of the turnaround can be attributed to managers and supervisors having an additional opportunity to learn the new culture norms by participating in learning review calls, which were formerly named incident review calls. To prepare for the calls, the safety and health team reviewed all reports of events for the month and selected those that 1) had the potential to be fatal; 2) involved a serious injury; and 3) were rich in learning opportunities. The team then invited the leader under whose watch the event occurred to complete a three-part event-learning process, formerly called an "investigation."

First, the leader prepared a summary report of the event. Next, a member of the safety and health team reviewed the report with the leader and coached the individual on how to ensure that the report used learning—not blame language, and covered questions that might come up in the formal review. The formal review, called the "operational learning call," followed. Members of the leader's operational division, from CEO to supervisor-level, attended the call.

Each call, or learning event, opened with standard reminders from the safety and health director explaining that the presenter would share the story of the work and describe the scenario, how decisions made by those involved made sense to them at the time, and what was learned when the team looked back on the event with knowledge of the outcome. The presenter also discussed what changes would be implemented to build additional safety defenses in the company's systems.

Method Three: In-Person Meetings

The third method in the project used face-to-face meetings to engage the company's field workforce, which rejected digital communications. While every field employee had an email address, they were rarely—if ever—used. Field workers also did not want to use their personal cell phones for company business. Many refused to use company apps on their phones, and some saw such apps as invasive.

Because the project team did not have the option of using an internal communication app for this project, face-to-face communications were a better option. These communications took the form of the team-level cascaded monthly meetings, which were dubbed "meeting in a box" (MIB).

The term MIB refers to a common content and an integrated process intended to help all members of the organization, from chief executive to frontline worker, understand the learning and improving safety culture topic each month. The topics for each month were planned by the project team at the beginning of the year. Topics were drawn from the HOP principles and the safety culture research the team conducted. which showed the team and the safety leaders which safety culture areas in the organization needed the most attention. The team would then develop a script on the topic that served as the teacher's discussion guide. The guide consisted of an explanation of the topic, its part in a learning and improving safety culture, a mini-case study to illustrate the topic, and a set of questions that the teacher—the frontline supervisor—could use to lead a team discussion on the topic.

The MIB process consisted of an in-person cascade in which members of each level of the organization taught the month's topic to members of the next level using the common teaching and discussion guide script. Business leaders taught their managers and supervisors; the supervisors taught their teams of frontline workers. Business leaders also taught their managers and supervisors how best to use the script when they led team discussions.

Using the MIBs:

- •ensured that employees at all levels understood what a learning and improving safety culture looked like,
- •demonstrated the value of a learning and improving safety culture to employees, and
- •introduced and coached employees in the behaviors, norms, and language of a learning and improving safety culture.

For example, in one 3-month sequence, the MIBs focused on how to encourage openness and trust in communications,

providing a foundation for learning together. Another MIB taught teams how to use the company's communications processes for sharing safety lessons across the business. A third MIB taught teams why it is fundamental in a learning safety culture to treat everyone as if they always come to work to do a good job.

Method Four: Research & Measurement

The fourth method was to frequently conduct quantitative and qualitative research and measurement. This helped the project team and the project's executive sponsors track progress in the culture change and identify needed adjustments during implementation.

The quantitative research included all-employee surveys to assess changes in the safety climate of the organization and a survey of managers and supervisors to gauge their support of and involvement in the culture change initiative. The qualitative research included:

- 1) a listening tour conducted by senior executives with managers and supervisors to discuss the results of the second employee survey, and
- 2) interviews with employees regarded by peers and supervisors as strong safety advocates to discuss how communications could be improved, to address an issue that had been uncovered during the listening tour with the effectiveness of company communications.

Safety Climate Surveys

The employee safety climate surveys began with a benchmarking study in the first year of the initiative. As Bhandari and Hallowell (2022) note, safety climate is an indirect measure of safety culture and performance. At least since the early 2000s, safety climate has been shown to be a predictor of safety performance. As safety climate measures improve, critical safety elements also improve, such as hazard recognition, risk assessment, compliance and safety communication. More importantly, recordable injury rates and safety violations decrease over time.

Making safety improvements by changing the safety climate and culture is difficult and takes time. Blaming and punishing employees seems simpler and can feel more immediately gratifying to managers. But organizational researchers have known for nearly 20 years that changing the climate and culture is more effective (Neal & Griffin, 2006).

The benchmarking survey revealed a company safety culture that strongly

emphasized personal accountability. The research also showed that the foundation for a learning and improving safety culture was not very strong. For example, employees said:

- •When something unsafe is reported, it does not get corrected in a timely manner.
- •Incident investigations were not fact finding; they were fault finding.
- •Employees were seldom recognized and rewarded for safety performance.

In the third year of the initiative, the project team repeated the all-employee climate survey. Responses showed that the program had made significant progress in creating a learning and improving safety culture. All seven of the items that comprised the core strategic measures for the initiative improved in 2020 compared to 2018. For example:

- •"Incident investigations are fact finding and not fault finding" was up nearly 13 percentage points.
- •"Where I work it is NOT okay to talk about the realities of work, including safety, because 'if I tell you bad news, I'm going to get punished for it'" improved 7 percentage points.
- •"We regularly communicate the lessons learned from each safety incident across my company" went up nearly 5 percentage points.
- "Employees are recognized and rewarded for proactive safety performance" rose 4.5 percentage points.
- "Employees and managers work in partnership to keep all workers safe" increased 3.7 percentage points.
- •"Employees on my team consistently report hazards and near-misses" went up 2.5 percentage points.
- •"I feel comfortable raising safety concerns where I work" went up 1.5 percentage points.

Moreover, a large majority of employees said they understood the culture change (79.5%) and valued it (86.1%).

Manager & Supervisor Survey

Between the two climate surveys, the project team conducted a manager and supervisor survey 1 year into the implementation of the safety culture change program to see how well the program was reaching them. The survey showed three very important things:

- •93% saw the value of a learning and improving safety culture.
- •86% said making the culture change was an important part of their jobs.
- •82% said they used the behaviors of a learning and improving culture in leading their teams.

These findings were also an early indication of the efficacy of the MIB as a teaching tool.

Listening Tour

The listening tour conducted by senior leaders took place at the end of the third year, after the second climate survey. The project team invited a select group of senior leaders who headed the major business divisions to facilitate focus groups with a cross-section of their supervisors and managers (Boutwell et al., 2023). To prepare them, the project team drafted the questions and content for the discussions and reviewed them with these senior leaders. The team also coached the leaders on how to transfer to the focus group activity the skills they had employed participating in learning teams and leading MIB discussions. In all communications with supervisors and managers about the listening tour focus groups, the project team described the focus groups as a "virtual listening tour" to emphasize the purpose of the meetings. Due to restrictions on in-person meetings at the time, these leaders facilitated the focus groups on a virtual meeting platform.

These focus groups helped the project team further refine the safety culture change initiative in its third and fourth years. The groups showed that supervisors and managers saw the change to a learning and improving safety culture as a work in progress that was getting better. They also showed there was still work to be done in:

- •helping employees trust that safety was a top priority of senior managers,
- •having managers respond to what employees needed to do their jobs safely, and
- •continuing to improve all aspects of all safety communications, not just communications associated with the safety culture change initiative.

One-on-One Interviews

One-on-one interviews conducted with employees and supervisors identified by their managers as strong advocates of safety (referred to as "safety champions") took place in the fourth year of the initiative and probed the safety communications issue uncovered during the listening tour. The purpose of these interviews was to learn more about how supervisors and employees viewed safety communications and how they could be improved.

Interviewees made clear that:

•Employees viewed safety communications very broadly, they were not just official communications from upper management but included any

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communication about safety from anyone in the organization.

- •Employees especially thought peerto-peer and face-to-face communications were effective, as opposed to mediated communications.
- •Cascading information, such as in the MIBs, was effective but its effectiveness depended on the skills of individual managers and supervisors.
- •Cell phone texting for *job*-related communications was on the rise, but employees still resisted texts and apps for *company*-related information.

Method Five: Language

The fifth method used to change the safety culture was to change the language of the safety culture, especially for incident inquiries. Thanks to the work of Pupulidy (2020) and Vesel (2020), we know that the language traditionally used in safety incident inquiries, particularly in English-speaking cultures, predisposes those conducting the inquiry toward blaming some human actor for the incident—usually the one closest to the event.

Traditionally, safety incident inquiries use agentive language to state in active voice sentences that an incident occurred because somebody did something (e.g., "Jim dropped the wire cutters"). Such language and structures serve to cut off inquiry once we know who committed an act. They discourage looking at wider systemic causes and influences on events. We find that when we widen our view to these systemic influences, we make ourselves safer by controlling for them.

With this understanding of how language—especially language used for safety incident inquiries—helps shape culture, the project team saw the need to deliberately change the language used for the company's safety inquiries. For years, those inquiries had been called incident investigations, connoting that their purpose was to find out who was to blame for the incident. The manner in which they were typically conducted and the language used during the process further supported a culture of blame.

Traditional safety investigations can look like criminal investigations. The people involved are often separated and asked to document a personal account of the case. The outcomes of the investigations are called "factual reports." In reality, they tell the events from the "often-biased perspective of the investigation team" (Pupulidy & Vesel, 2017), focusing on the last act the employee committed just before the negative outcome. As part of the shift to

a learning and improving safety culture, the safety and health team changed both the process for conducting inquiries and the language used for them. The event learning process became worker-centric by asking that the learning events include the people involved as a group, which was called the learning team.

The team inquiry starts with a simple question such as: "Tell me about what happened." Then the inquirer listens with no interruptions or opinions, using the "humble inquiry" approach, Schein's (2013) term for "the fine art of drawing someone out, of asking questions to which you do not already know the answer, of building a relationship based on curiosity and interest in the other person."

Once the story about the work is completed, the inquirer explores with curiosity and not judgment the items that, in retrospect, could have led the group to a different outcome. The team breaks those items into categories of things they can fix, things they can influence and things they cannot fix.

As the learning reviews matured and managers began to use the new language, the project team observed that:

- •Leaders did not focus on employeecentric actions such as retraining the person.
- •Leaders did not use language that would suggest they were slipping back to the idea that the worker is a problem to be controlled. Leaders started to ask, "What influenced their decisions? How did the decisions make sense at the time?"
- •Leaders no longer talked about retraining the employee but asked about the quality of the training program, the systems behind the training, and how effective they were for employees.

In addition to changing the language of inquiries, OSH professionals worked directly with senior leaders to coach them in how the language they use affects learning by introducing bias into the ways they talked to their teams about safety. Changes included:

- •Leaders learned to ask, "What failed?" instead of, "Who failed?"
- •Leaders shifted away from asking, "Why?" to asking, "How?"
- •Leaders reframed old questions into the language of learning, such as changing, "Did the crew feel pressure to complete the job and rush?" to, "Tell me more about your desire to meet customer or company expectations on this job?"

Lessons Learned

When it comes to culture, don't guess. Know. Many organizations talk about safety culture and have culture

initiatives. But without using a tool to assess their organization's safety culture, they are guessing about where they are, where they are going, how to get there and whether they are making progress.

In this case, the project team found that they could best assess the safety culture by measuring safety climate, which is a reliable predictor of safety performance, using a combination of quantitative and qualitative research tools. Quantitative tools such as surveys provide generalizable findings. Qualitative research tools such as structured interviews, focus groups and learning teams help organizations understand their safety cultures by discovering what safety areas and questions to focus on with the quantitative survey and by probing the results of the quantitative survey to see what may have generated them.

What you say matters. One of the most effective, direct ways to change the safety culture in an organization is to change the safety language. To do that, first understand how the safety language used in an organization supports the existing culture. Then assess how the current language either supports or undermines the desired culture. If it undermines the desired culture, develop a language that is consistent with the desired culture. Introduce the language changes to the organization organically by using them in standing safety activities such as incident reviews.

Deploy change tactics synergistically. It is possible to treat and use the culture change activities detailed in this case as a collection of separate, standalone tactics. But their greater power to create change comes when they are managed as an integrated set of interventions.

For example, it would have been possible to involve senior leaders only as endorsers of the change. And it would have been possible to task supervisors to be the teachers of the change to their teams without any connection to their senior leaders. It would also have been possible to support supervisors in that role simply by emailing them a script each month, likely written in the language of the current culture, and then hoping that they would use it. That approach likely would have produced an erratic implementation of the change plan, as it has in other organizations.

Instead, senior leaders acted as the master teachers of the change, coaching managers and supervisors in how to teach their teams the learning culture topic of the month. Supervisors could then train their teams using a common teaching guide that was written in the language of

the new culture, all the while knowing that their senior leaders expected them to meet that obligation because they had made it clear in their face-to-face coaching.

Begin with the end goal in mind. In the case of the utility, the desired goal was to transform the existing safety culture to a learning and improving culture based on HOP principles. This end goal informed everything else: the content and structure of the formative focus groups, the questions in the surveys, setting up senior leaders as master teachers, having frontline leaders teaching the workforce, the content and order of the monthly training discussions, and the changes in safety processes and language.

Teach the teachers of the teachers. Essential preparatory steps in transforming the safety culture to one based on HOP principles were teaching the members of the safety team how to apply those principles on the job and how to use them when talking about safety with the line leaders they work with every day. Those steps got them ready to coach line leaders in understanding the new culture, how to talk about it, and how to teach it to their teams.

Leverage the safety team. Members of the safety team outside the project team have critical relationships on a daily basis with company leaders. That means they can serve as coaches and trusted advisors to leaders across the organization. Do not leave them out when planning a culture change initiative. In this case, safety team members not only prepared company leaders to share MIBs but also became trusted partners who could voice concerns and seek clarity about the change effort and the material within MIBs.

Conclusion

Changing the safety culture of an organization is difficult. It is especially difficult to change from a culture of blame to a learning and improving culture. In a culture of blame, a strong bias exists among managers, including safety managers, that if something went wrong, someone must have blundered. That bias is reinforced by the many rules, regulations and procedures governing safety. They imply—and managers often say the way to keep employees safe is to have them meticulously comply with the rules.

But change is possible. By the fourth year of the safety culture change initiative at the utility, it was clear the safety culture was shifting. Surveys and focus groups showed that managers and employees understood what was changing and saw the value of the change.

Important employee and manager behaviors were changing, such as:

•Employees said they were more willing to report incidents and near-misses in the new safety culture.

•Employees saw incident learning reviews as focused on fact-finding about opportunities to improve safety with changes to systems and not on finding fault with individual employees.

•An increasing number of employees felt it was safe to talk about the realities of their work, including safety, with their supervisors and managers without fear of punishment.

 More employees saw that the utility was becoming a learning organization that communicated lessons learned from incident inquiries across the company.

Perhaps more telling were the signs that managers and supervisors were changing. Managers and supervisors said they saw the value of the change in culture. More significantly, they said they saw leading the change as part of their job.

Driving those changes were the five methods detailed in this article: coaching senior leaders to be the face of the change, making managers and supervisors both learners and teachers, using in-person communications to reach field workers, conducting frequent quantitative and qualitative research and measurement, and reframing crucial elements of the culture's language to create and embed change. PSJ

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