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Building Better Community Of Practice

AN INTRODUCTION TO THE 4D'S - JEFFERY LYTH

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An Introduction by Jeffery Lyth

A few years ago, I had a huge 'A-ha!' moment at a Todd Conklin seminar. Since then, I have been telling companies in various industries about something called the 4-D's.

Many have experimented with the idea, and some even initiated 4D conversations across the whole scope of their (international) operations! Workers like it, leaders like it, and many proactive improvements are being made to the places where many people work.

It's a simple and easy conversation to have, but the act of asking the questions (and then making improvements based on the information received) has led to greater engagement, better worker perceptions of leadership, and numerous opportunities to improve the operational capacity for achieving more reliably successful work outcomes.

I believe this is because despite their simplicity, whom we are asking, what we are asking about, and how we are using that information to improve the system of work is a practical application of many of the concepts emerging from 'new view' safety as well as contemporary leadership thinking.

You might say it's just asking Better Questions or a simple way of having a mini Pre-Accident Investigation, and you'd be right!

THE 4Ds

THE NEXT CHAPTER OF OPERATIONAL LEARNING FOR HOP AND LEARNING TEAMS

Where they came from

I first learned about 'the three D's' from Ivan Pupulidy, PhD, one of the amazing speakers at Todd's seminar in 2019.

In that session, Ivan told us about his work with the U.S. Forest Service. Towards the end of his session, he mentioned "the 3-D's". He said that in the U.S. Air Force, when pilots graduated from flight school, they were told, "Don't do anything dumb, dangerous, or different!". In addition, they might be told that if they can't make the decision or resolve the issue, to get their superior involved.

These ways of using those words represented a kind of a rule-based approach as in 'don't do', then they advanced into a form of stop work authority, as in 'stop and get your supervisor'. But in industry, we already had an overload of rule-based approaches already, and safety legislation generally gives workers stop-work authority or the right to refuse to work if in danger.

What Ivan said next amazed me and really seemed to embody the change that is so desperately needed in safety improvement. In his work at the US Forest Service aviation wing, Ivan had applied a humble-inquiry, Edgar Schein-type approach and utilized those questions proactively:

- Tell us when something seems dumb
- Tell us when something seems dangerous
- Tell us when something seems different

From my previous work in frontline leadership skills development, the utility of using these words this way struck me as a simple but effective tool that could be easily deployed in organizations without any significant workshopping, policy change, or even permission, for that matter!

Where they came from

I mulled it over and pondered for some time and felt that for this to be most effective in an industrial setting (construction, longshore, manufacturing, forestry, energy, logistics) there needed to be another D-word in the mix: **difficulty**.

- Tell us when something seems particularly difficult to do or to do well

I figured that in the U.S. Air Force, on an aircraft carrier, or in the US Forest Service, the difficulty of work was near constant. Maybe that's why "difficulty" never made the cut for their D words.

But in industrial operations, when a task is difficult to perform or to perform well, it could be an important early indicator, so I figured it had an important place in this proactive inquiry.

THE 4Ds

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WHAT THEY ARE

DUMB (Sensemaking)

The word 'dumb' is certainly not the best in some circumstances, but it's very effective in the field to initiate a conversation about things that don't make sense to someone.

A lot has changed since I began my working career almost 40 years ago. The world seemed a little slower and a little simpler. There was time for training and learning, and those who taught others had been doing the work a very long time so there was a lot of career overlap and time for experienced workers to mentor and teach the more junior ones. There also seemed to be more of something we used to call "common sense". Groups of people that found themselves working together often had a similar background of experiences and a similar pathway leading to where they were. I think those old days had some capacities for success baked right in, whereas these days, how individuals make sense of things is a little outside of what you might call 'common'.

Contemporary leaders in a very informed, diverse, and multicultural workplace need to start paying attention to how people make sense of their tasks and their surroundings, and any sense-making that might become shared or common on a team needs to be facilitated because doesn't just land in our laps like it used to.

Weick and Sutcliffe said that sensemaking (or sense-making) is the process by which people give meaning to their collective experiences. It has been defined as "the ongoing retrospective development of plausible images that rationalize what people are doing".

In the Field Guide to Human Understanding Human Error, Dekker tells us that determining why someone's actions made sense to them at the time (based on their cues and their interpretation of the circumstances) is the most important thing to learn.

Making proactive inquiries into how people make sense of things and having them speak up about anything that doesn't make sense to them is critical information for the leader and the entire crew.

Also, we don't want people bending over backwards to make sense of things at work. Ideally, we're lowering the threshold of what we want to hear about and what we want to talk about, and we are demonstrating that we appreciate that the workforce's interpretation of the work environment is the most important interpretation, the only one that really matters.

DANGEROUS (Risk)

Safety Managers and operational leaders have been trained to think in terms of hazards and controls, or even multiple hazards and multiple controls stacking or accumulating throughout a task, but there isn't much consideration of how hazards can interact in the messiness of real work and exponentially increase risk. Typical safety management approaches are not likely to catch this, but an open conversation about people's perception of danger may.

Some industries I work with are hung up on work stoppages, to the point of holding numerous training sessions and workshops on how to manage and mitigate work refusals. I think this is a holdover from that old safety-I perspective that says our systems are well-designed and complete, and people should just do as they're told. I've been coming at these organizations from a slightly different angle; I've been showing how death hides in normal work, encouraging them to value the bottom-up perspective on the work and to see a report of 'danger' as an opportunity to demonstrate good safety in action. Between the initial report of danger and the potential work stoppage is the opportunity to practice safety leadership in action using any of the 'field-level risk assessment and control' tools out there.

Oxford Research defines 'hazard perception' as the ability of a person to detect potential hazards, and 'risk perception' refers to people's subjective judgments about the likelihood of negative occurrences. Both are important to discuss because it will surface which hazards people care about and how they deal with them. It is an important precursor to operational performance, and experts recommend that leaders keep an open dialogue about risk alive.

This lowers the perceived threshold of risks worth talking about (i.e., worth a potential stoppage and accompanying fallout, formal and otherwise) and lowers the risk of retaliation for pausing work.

WHAT THEY ARE

DIFFICULT (Challenge)

Difficult is the 'D' I felt needed to be added for industrial operations When a work task is difficult, many will simply just 'soldier on' and 'make do', possibly assuming that difficulty is just the nature of the task. But task difficulty can be an important sign that the task is being done incorrectly or that something is amiss elsewhere in the system.

I've known work crews in many industries to rise to the challenge of difficulty by pressing ahead in their original plans with greater gusto to overcome the challenge. I'm also aware of stories where a crew paused to regroup and reflect on why the work they were doing might be so difficult, and I'm quite sure tragedy was averted in a few cases.

A simple and horrible example is the worker who was removing a cap from a piping system and experiencing unusual difficulty in doing it. It did not occur to him at the time that the difficulty he was experiencing could have been because, on that day, pressure had not been bled out of the piping system.

Field leaders benefit from creating an open dialogue about the difficulty of work. Sometimes it's just difficult, sometimes it's being done wrong (righty-tighty/lefty-loosey!), and sometimes that difficulty is a red flag, but you don't know if you don't ask, and you really want to lower the threshold on what your crew feels is worth talking about.

DIFFERENT (Change)

Some changes are expected, some are unexpected but insignificant, and others are major red flags.

- What is that fluid puddle below that machine this morning?
- What is the impact of a change in weather overnight?
- Does that crack mean that the soil has become unstable?

A weak signal of change can be a quiet early indicator of an emerging issue that may not appear significant at the time but may become significant in the future. Weak signals can be identified as a part of 'scanning' the operational environment, can supplement trend analysis and can be used as a foundation for detecting emergent critical risk.

Change is interesting. We can create and achieve incredible things in business, but it's not the magnitude of the work that makes it interesting; it's the surprises and changes along the way and how we navigate them.

After all, if it weren't for change, every schedule, budget, plan, and safe work procedure would be perfect, and 'work as done' might align more consistently with 'work as imagined.'

To me, keeping an open dialogue about change honours Harvard Prof. John Kotter's explanation of the reason we need leadership skills in organizations: to navigate and deal with change at all levels!

WEAKSIGNALS

Why use them?

I believe there are many good reasons why you should experiment with 4D conversations in your organization, but here are just a few.

They help us practice Conklin's Human and Organizational Performance principles.

Once we understand #1 "Error is normal" and #2 "Blame fixes nothing", we're sometimes left wondering what we can tangibly do next to continue down the path of seeing safety as an operational capacity for success. Asking about the 4D's and acting on the information received is HOP principles #3 "Context drives behavior" and #4 "Learning and improving are vital", in action!

These are conversation-starting questions that help leaders to learn the operational context in which work takes place, and they provide opportunities to improve the system of work that are within their circles of control. This experience may better prepare leaders for HOP principle #5 "Leader's response to failure matters".

In a recent Pre-Accident Investigation Podcast episode, Todd talked about the contribution of Australian steel industry executive Brett Tarrant. Brett has been on the HOP journey for some time and wonderfully articulated why he feels workers are not likely to speak up. They are:

- They fear being blamed or seen as 'whinging and whining.'
- They have tried to raise issues before, and nothing happened.
- They don't see an issue as being worth raising; operational rub points are normalized.
- They think that whatever will be done to 'fix' the issue will only make their job harder.

Asking these questions embodies contemporary and effective leadership in action. As described in Edgar Schein's work on Humble Leadership, this is leaders practising curiosity over judgment and humbly asking those who do the work to share their insights.

Likewise, if you look at Clive Lloyd's book Next Generation Safety Leadership, he suggests trust is the currency of effective leadership and that leaders must demonstrate integrity, ability, and care.

Asking these questions helps demonstrate that the leader:

- Has the integrity to understand that safety performance is more than just the absence of incidents,
- Demonstrates care by inquiring about operational details from the first-hand experience of work, and
- Can carry out improvement actions to change how workers experience the work.

I believe the asking of these questions is a small thing that pays respect to the big principles outlined by Weick and Sutcliffe in their research on High-Reliability Organizing:

- Preoccupation with failure because we are keeping an open and transparent conversation about critical risk alive on an ongoing basis.
- Reluctance to simplify because we appreciate the importance of weak signals and consider their influence on complex operational contexts before we seek to improve.
- Sensitivity to operations because we engage everyone in continuous learning through weak signal detection and discussion.
- Commitment to resilience because leaders learn proactively about the experience of work, they respond and recover from loss events in better ways.
- Deference to expertise because we are meaningfully communicating with those who do the work every day, and we value their expert account.

4D conversations allow humble, curious leadership practices to improve performance instead of passing blame or judgement down the hierarchy.

Conducting these conversations can help to remove barriers between workers and their leadership about what issues can (and should) be discussed and improves how field-level leadership responds to concerns.

4D conversations can help us think about the three fundamental worker rights in a more contemporary way:

- **The Right to Know**: Beyond WHMIS and training, let's create a mutual teaching and learning environment every day.
- **The Right to Participate**: Beyond worker reps and joint health and safety committees, let's encourage meaningful worker participation in a dialogue about work.
- **The Right to Refuse**: Beyond formal work, refusals is a healthy questioning and curiosity about hazards and risks in the work.

Benefits of use

Leaders who start having these conversations quickly find that categorising whichever D is being discussed is not overly important. Many issues identified could be described as dumb, dangerous, difficult, AND different!

But what is important is:

- The openness of the conversation initiated by the leader who demonstrates sincere curiosity and cares about the worker's experience of the work,
- The operational details that can be learned proactively before loss events occur,
- And how we improve the system of work for all workers who do the job and for the organization to reliably achieve its desired outcomes.

Having this discussion creates opportunities for the field-level leader:

- **Learning**: Understand the detailed experience of the work from those who do it.
- **Informing**: Teaching something previously not understood about the task or process.
- **Correcting**: Modifying a task or process for greater.
- **Concerning**: Stopping or pausing the work and correcting how it is being performed.
- **Sharing**: Debriefing with others who do this same work in the organization.

These discussions can also help reveal perceived 'goal conflict' between schedule, quality, cost, and safety goals that are often never raised or discussed.

"WHAT'S HAPPENING WHEN NOTHING BAD IS HAPPENING?"

Dr Todd Conklin

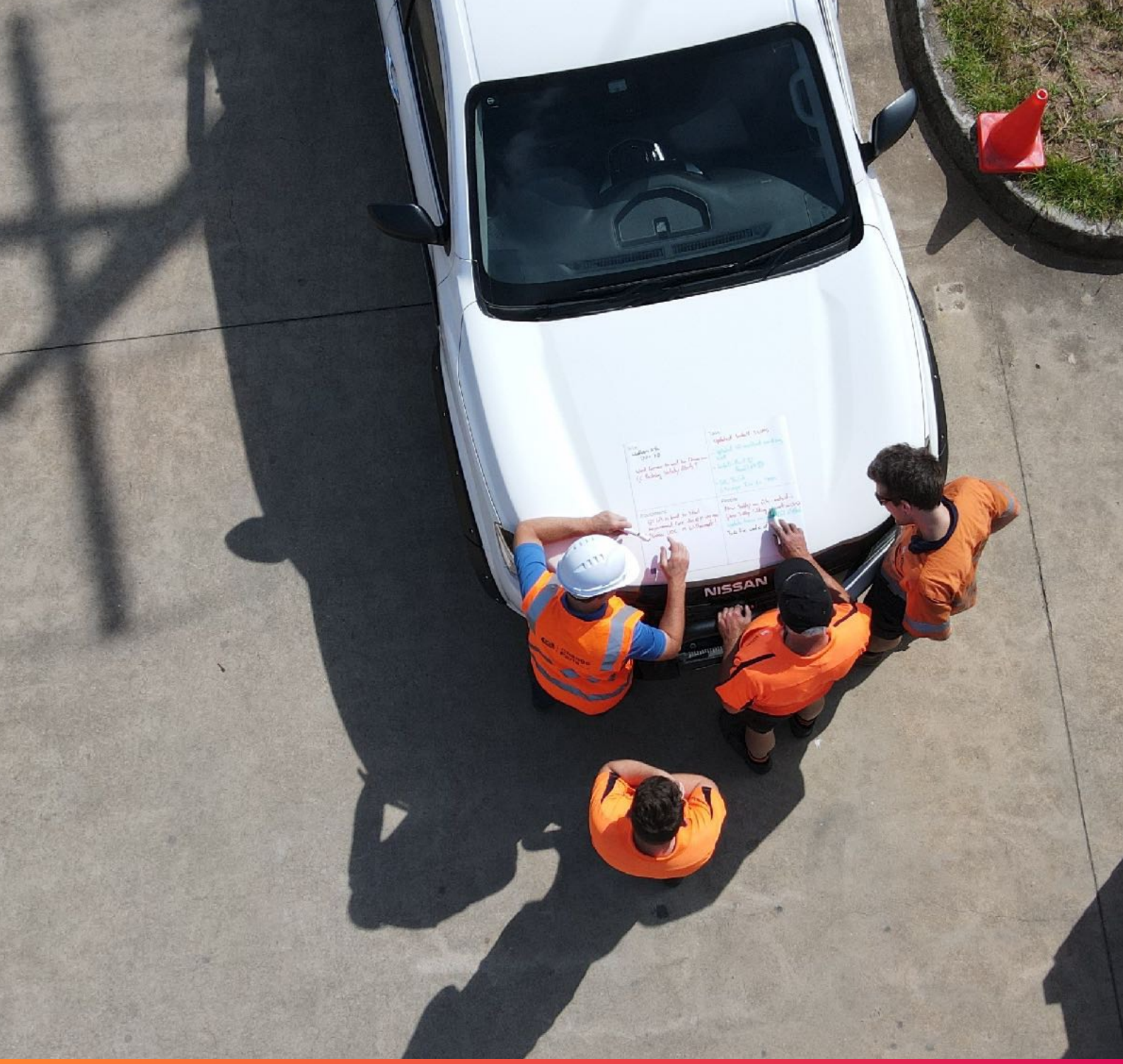
Conclusion

Todd Conklin states that "death hides in normal work" and that "stable systems make risk detection difficult", so we must learn how to look for it through better weak signal and risk detection. Having both parts of a full 4D discussion will help leaders learn from everyday work and is an important step in becoming a learning organization.

Ultimately, I think one of the most exciting things for organizations that start conversations around the 4D's is that they are tapping into a critically important list of performance factors.

In the first chapter of the recent book Do Safety Differently by Dekker and Conklin, they talk about some interesting research about patient safety incidents in a healthcare system and also successful patient admissions that had no safety incidents. They found that the same set of messy operational detail was present in both good and bad outcomes. They identified eight factors that were consistently present in successful work outcomes:

- Seeking **diversity of opinion** (input of the workgroup in dialogue).
- Create the **opportunity to voice dissent** (it is safe to speak up when conflicted).
- Keeping a **discussion about risk alive** (awareness of danger alive throughout the work).
- **Deferring to expertise** (expert insights from those that do the work everyday).
- An **ability to stop work** (showing that it is not only safe but encouraged to stop the task if danger is present).
- **Breaking down barriers** (field-level and line managers are humbly asking for operational insights to be shared).
- **Not waiting for audits or inspections** to improve safety (seeking opportunities for operational improvement).



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Watch the Introduction to the **4Ds video here**.

Download the full white paper at https://www.learningteamscommunity.com