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RE: Implementation of Human and Organizational Performance (HOP) methodologies in Plymouth Divisions

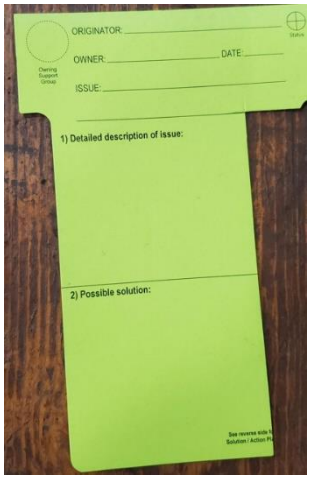
The Minneapolis Divisions of Olympic Steel volunteered to pilot Human and Organizational Performance program for all of Olympic Steel.

The Minneapolis (Plymouth) Minnesota Divisions partnered with Mr. Bob Edwards to come and teach the fundamentals of HOP. The fundamentals of HOP focus on the complexity of everyday work. It includes five principles that help to engage our workers and our work: ***people make mistakes, blame fixes nothing, context drives behavior, learning and improving are vital, and leaders' response matters***.

These principles drive how we engage with the people doing the work. We understand that just because an injury or accident didn't occur doesn't mean that we were safe today. Getting everyone to report near misses and events allows us to unpack much of that complexity. The engagement of employees is done through a two phased approach: Bringing the people who do the job to discuss complexity through learning teams allows us to get unfiltered information about how the job is done daily and the complexity that the employees must navigate on a daily basis (normally successfully and without an event occurring). These learning teams are conducted by a facilitator with Management and Supervision not in the room. Management normally will kick off the meeting by thanking everyone for participation and letting them know that this meeting is a safe space, and everyone can feel free to speak freely and honestly (this is critical), as we want truly to understand the good, the bad, and the ugly so we can make improvements. Once the meeting is kicked off Management leaves the meeting, and the facilitator takes over.

The facilitator is someone who has a general curiosity of how the work is being done and has been trained on how to facilitate a learning team. The notes from the meeting are taken on a flip chart. The initial meeting lasts between 30 minutes and an hour. The first learning team meeting focuses on the complexity of the job and not around a specific event or incident. The learning team members leave, and a second meeting is scheduled in a day or so. This allows for employees to have "soak time". They have time to think and come back to the second meeting. At the second meeting the facilitator will review the notes from the previous day to ensure what was written down is correct. The facilitator will then generate discussion around if anyone has anything to add. The learning team will then discuss some actionable items that can be considered to help better manage the complexity and make the safe choice the easy choice.

It is important that these actionable items are captured so that they can be worked on and not forgotten about. If these actionable items are not engaged, the momentum created by the learning teams can be quickly lost, as employees could see this as another "flavor of the month". To ensure that this does not happen, we capture these items on our continuous improvement board.



Because these items are tracked on the continuous board it can be seen by all employees. A weekly meeting also occurs with the supervisors, plant manager, operational excellence, and EHS occurs to review updates from the previous week to ensure accountability and that items are not forgotten about.

To ensure that the HOP methods and program continues to move forward, we have incorporated HOP into our Central Region Lean Six Sigma Green Belt training program. The HOP methods cross over safety, employee morale, operations, and continuous improvement.

The other way that we utilize the HOP methods is in our day-to-day discussions with all employees. This has been a real game changer in regards to helping improve the safety culture. By shifting our focus from who did what wrong to what happened in the process has allowed us to learn and improve.

Employees are more engaged in discussions around safety. To layer on top of the HOP methodologies we also have a weekly safety walk conducted by one office/manager and one plant employee that occurs on Thursdays. This is rotated so that every employee in the facility is included in doing safety walks. These safety walks started out as house cleaning reports, but over the maturation of the program it is more now about safety discussions with the employees. The results of the safety walks are reported out the Senior Regional Management every Monday.

Details of participants:

Name	Job Title	Role of Participant
Tom Sacco	Regional Vice President	Key stakeholder, helps drive improvements from executive level
Matt Grussing	General Manager	Key stakeholder, ensures program is viable at the MN Plate Facility
Tim Busch	Plant Manager	Provides resources as needed, trained project facilitator, and participates in the weekly continuous improvement board meetings.
Robert Erion	Project and EHS Manager	Provides resources from Safety and Operational Excellence departments, trained facilitator, participates in the weekly continuous improvement board meetings. Instructor for Lean Six Sigma program that includes HOP methodologies.
Will Robbins	Senior Project Analyst	Provides Operational Excellence support, trained facilitator (is currently our lead facilitator), participates in the weekly continuous improvement board meetings. Instructor for Lean Six Sigma program that includes HOP methodologies.
Bob Edwards	HOP Coach and Consultant	Provide guidance and training on HOP fundamentals and Learning Teams
Barry Edson	Supervisor – 1st Shift	Participates in the weekly continuous improvement board meetings.
Miguel Cardenas	Supervisor – 2nd Shift	Participates in the weekly continuous improvement board meetings
Multiple Learning Team and HOP participants		Many employees have participated in HOP training and in learning teams.

After the program was successfully launched in Minneapolis, it was then launched in our Bettendorf, Iowa division.

Explanation and evidence of how this initiative/project improved safety:

The focus switched from lagging indicators to leading indicators (near miss reporting and poka-yokes).

In addition to driving better safety engagement, the participation in our safety committee has increased. Our near miss reporting for this year has already exceeded the total for all of last year and we are on pace to more than double the number of near misses this year. Our documented Poka-Yoke (error proofing) reporting has also exceeded all of last year and are on pace to more than double the totals from last year.

The engagement of employees around safety is a bit more difficult to capture in variable data, however the walks in the plant by the EHS Manager are taking approximately twice as long due to the amount of information that the employees are now sharing. Since we switched from the blame and punish mode to the learn and improve model the cooperation around safety is dramatically different.

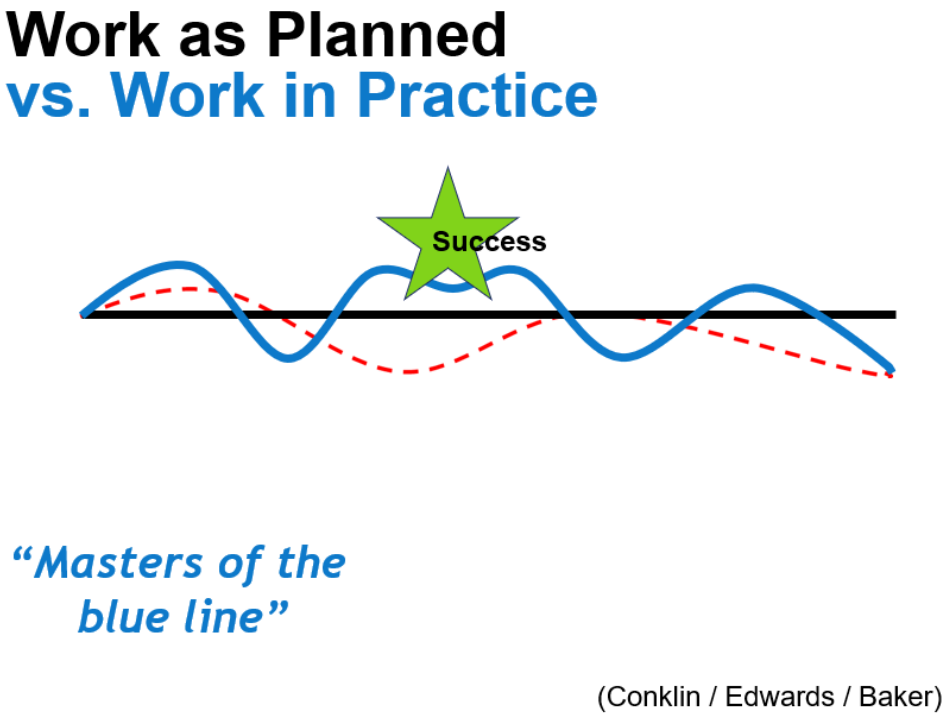
While we don't focus as much on lagging indicators (recordable injuries) those metrics have also improved.

Summary of key lessons learned:

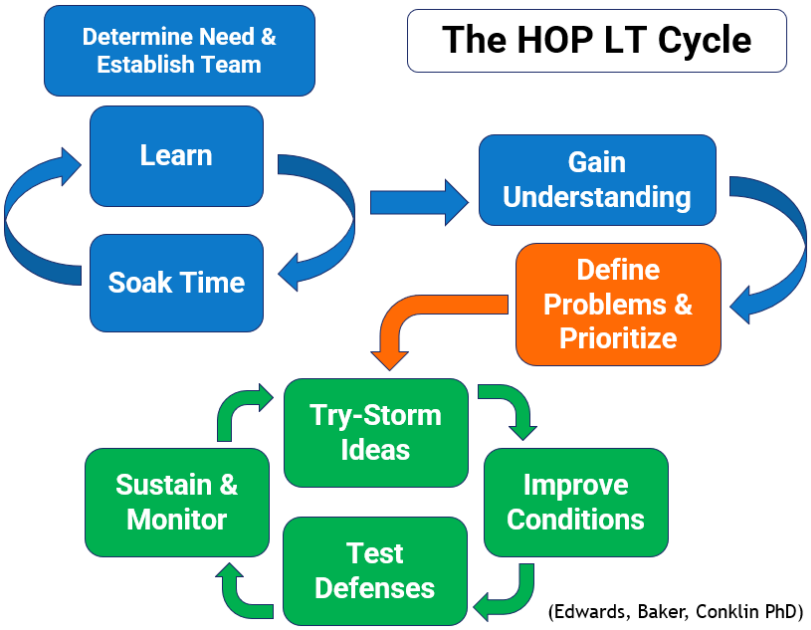
There are so many key lessons and learnings that came out from the implementation of this program. Some of the highlights include:

- Start small – Quality over quantity
- HOP is not a certification, but a way of thinking and acting
- The understanding of the complexity of work: simple vs. complicated vs. complex vs. chaotic.
- The different tools and techniques used to address these different levels of complexity
- How many "error traps" can exist in daily work and how to work on removing these.
- The concept that people want to do good work. They are not the problem but, in many cases, they are the solution.
- When the HOP principles are presented to office employees, supervisors, and managers the response is "wow this is really enlightening", and when presented to the plant personnel (the people doing the work) the response is "yeah, it's about time.".
- Coachable moments. It is easy to say you buy in to the 5 main principles until something goes wrong. It is in those moments that coaching becomes important. To remind management that we want to learn and improve vs. blame and punish is a topic that sometimes needs to be revisited.
- In the rare occasions where the issue was truly an employee problem and not an error (where disciplinary action is taken) you do not want to handle this as a HOP situation. If you use HOP you can not hold the comments coming out of a HOP learning team against an employee. It has to be a safe space and if you don't abide by that you will have a very difficult time conducting a second successful HOP learning team.
- Quit trying to fix employee problems in a meeting room with managers only. You need the voice of the person doing the work.
- A key topic of HOP is "try-storming". Go and try something with the employees to see if we can work towards a solution. Waiting for the perfect solution is not going to get you there.
- We used to do things to the employees, then we tried to do things for the employees, but with HOP we want to do things with the employees.
- The amount of untapped knowledge that the people doing the work is being realized. The HOP program has allowed us to tap into this information.
- The concept of the blue line/black like principle. The diagram below shows the concept. The black line is work as imagined. The blue line is work as it actually happens, and the red line is the combination of

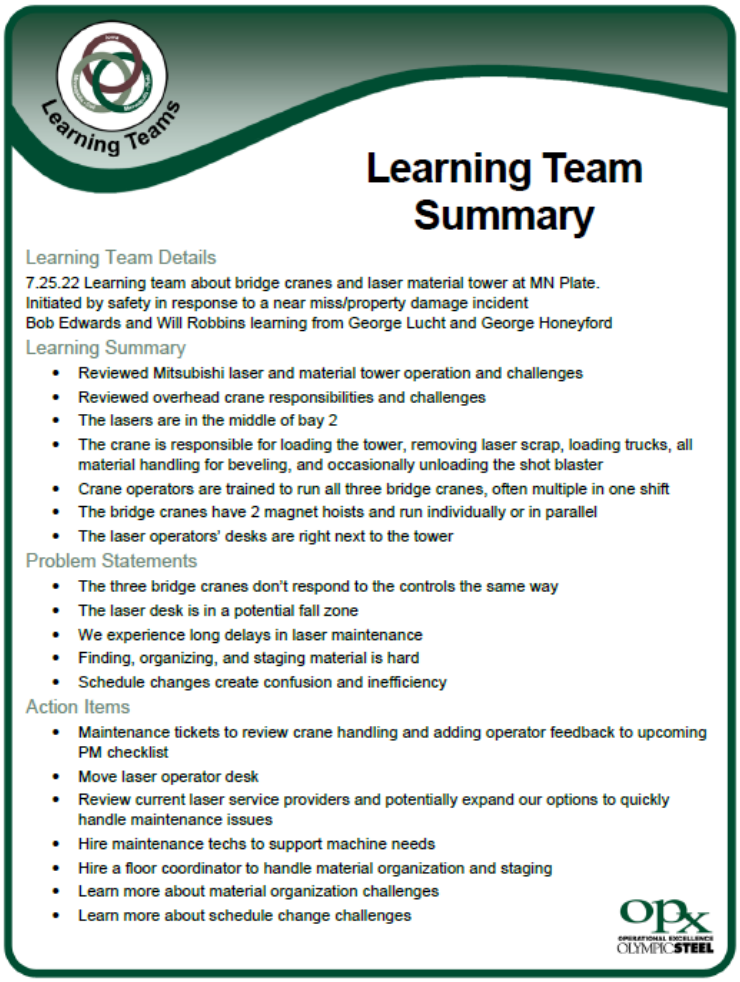
hazards. When the red line and the blue line intersect, an accident or injury can occur. It is important to note that the blue line is "normally successful". We manage complexity every day.



- Some additional key concepts include: work is complex, environment of accountability (you can't force someone to take accountability for their actions; therefore you can't hold someone accountable), capacity lessens consequences, and curiosity is key.
- Operational Learning is not a traditional investigation, it is not worried about the collusion, it is not focused on the "one true story", it is not focused on one "root cause", and it is not focused on blame.
- Operational Learning tells the story of how work normally gets done, tells the story of complexity, tells the story of normal variability and coupling, and tells how the conditions lead to this type of event if an event brought the Learning Team together.
- A Learning Team must include: a safe place to talk, the facilitator and participants being teachable, seek for Learning First (do not look for solutions right away), allow for valuable soak time, after learning and soak time then look at defining the problems, and team generated ideas.



- Develop a Learning Team Summary to capture key learnings. The actionable items must be tracked and followed up on.



Learning Teams

Learning Team Summary

Learning Team Details

7.25.22 Learning team about bridge cranes and laser material tower at MN Plate.
Initiated by safety in response to a near miss/property damage incident
Bob Edwards and Will Robbins learning from George Lucht and George Honeyford

Learning Summary

- Reviewed Mitsubishi laser and material tower operation and challenges
- Reviewed overhead crane responsibilities and challenges
- The lasers are in the middle of bay 2
- The crane is responsible for loading the tower, removing laser scrap, loading trucks, all material handling for beveling, and occasionally unloading the shot blaster
- Crane operators are trained to run all three bridge cranes, often multiple in one shift
- The bridge cranes have 2 magnet hoists and run individually or in parallel
- The laser operators' desks are right next to the tower

Problem Statements

- The three bridge cranes don't respond to the controls the same way
- The laser desk is in a potential fall zone
- We experience long delays in laser maintenance
- Finding, organizing, and staging material is hard
- Schedule changes create confusion and inefficiency

Action Items

- Maintenance tickets to review crane handling and adding operator feedback to upcoming PM checklist
- Move laser operator desk
- Review current laser service providers and potentially expand our options to quickly handle maintenance issues
- Hire maintenance techs to support machine needs
- Hire a floor coordinator to handle material organization and staging
- Learn more about material organization challenges
- Learn more about schedule change challenges

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