

Continuous Improvement Using Lean Principles

April 2017 Update

Lean Facilitator Training

Trained Lean facilitators are at the heart of our smoothly functioning Lean university system. The training is based on a framework which uses an embedded Lean facilitator model; volunteer employees are trained in Lean fundamentals and principles, coaching, and facilitating. These facilitators then model, coach and teach Lean and continuous improvement to others. Facilitators receive in-depth training, including classroom learning and project activities, on topics like Lean methods and tools, facilitating techniques, and related skills. As facilitators, they lead continuous improvement events, consult with team leaders, conduct process map and workflow analysis, and teach and use problem solving skills and tools. They also develop group management skills that readily translate to their other responsibilities.

Effective Lean training is interactive and activity based. By the end of this training, participants gain a practiced understanding of the makeup of a Lean organization, the key concepts of Lean, the importance of a Lean culture, and Lean thinking. They also develop a working knowledge of and receive hands-on practice applying Lean problem solving methods, process mapping, and a variety of other tools and concepts. Being coached through facilitating actual university Lean improvement events enables the participants to transition smoothly from training to everyday application. Along the way, the participants are exposed to team building, group dynamics, communication skills, facilitating techniques, and organizational change management.



In Lean Facilitator Training, participants work in small groups to understand and apply Lean processes, methods, and tools.



The Lean Facilitator Training is seven classroom days of experiential learning and a set of carefully designed skill-building projects.

The participants represent the full range of positions at the university, including PhD faculty, managers, and union and non-union staff. They also come from every Vice President (VP) area. They are united by their passion for Lean and their drive to create university programs that are both effective and efficient. James Desrochers, the associate director of Industry Relations and a Lean facilitator training 2015 graduate, reflected, "Lean training and membership in the Lean facilitators group has given me another way to connect with faculty and staff. Informal connections across the university help me better understand the challenges other departments face while delivering their services. It is really a win-win to help streamline a system and meet new colleagues at the same time." Renee Hiller, the director of Human

Resources and a Lean facilitator training 2015 graduate, said, "Lean has not only provided me best practices for my own professional work space, but also given my entire department a better way to work, a better way to communicate, and a better way to continuously improve upon knowledge and skills. Lean is no longer something we "have" to do but something we WANT to do and is just part of our everyday work." When asked how he conducts himself differently since the training began, Timothy Griffin, director of Custodial and Maintenance Services and a current training participant, said, "I ask better questions. I ask probing questions, not just questions that result in yes or no answers. I realize that in order for me to understand a process and improve upon it, I have to ask questions that will identify the current state and the target state. I also recognize the importance of the Lean Culture: Respect for People, Humility, and Continuous Improvement."

Lean Outreach and Connections

- **5S for Safety presented at Michigan Tech Safety Liaison Meeting.** A recent Michigan Tech Safety Liaison Meeting focused on housekeeping and safety. The Office of Continuous Improvement (OCI) presented on 5S, which is a workplace organization method. When implemented, 5S can reveal hazards, reduce potential for injury, eliminate unsafe practices, and increase safety awareness.
- **Copper Country Lean Group meets at Little Brothers-Friends of the Elderly.** The quarterly meeting of the Copper Country Lean Group met at Little Brothers-Friends of the Elderly. Jaclyn Vandiver from UP Health System—Portage delivered a teachback on selecting and using metrics. Then Cathy Aten, the executive director for Little Brothers, provided the group a tour of the Lean improvements to their kitchen, featuring extensive visual management.
- **New Student Webpage.** The improvement website now has a section dedicated to informing students of the variety of ways they can become involved with Lean at Michigan Tech: www.mtu.edu/improvement/students. The simple pathway makes it easy to recall and places at students' fingertips information about quality-related academic courses; the Lean student organization, Leaders in Continuous Improvement; other learning opportunities like the Lean library, our blog, and our subscription to the Gemba Academy; and campus workshops and presentations.
- **The Van Pelt and Opie Library Leans into Spring.** The library staff hosted the April First Friday Social with a Lean theme. During the social, the library staff discussed their Lean initiatives. They also had several displays which showed ways the staff have incorporated Lean practices into their daily work.
- **Lean Facilitator Development Board Established.** A three-member board has been established to advise the OCI on Lean facilitator training, development, certification, and deployment. The inaugural board members are Margo O'Brien from VP Finance, Laurie Stark from VP Academic Affairs, and Kathy Wardynski from VP Administration.
- **New Student Process Improvement Coordinators.** The OCI welcomes Anita Paquin, a Mechanical Engineering Technology major, and Arianna Laiho, a biomedical engineering major, as new [student process improvement coordinators](#).



Cathy Aten relates the difference it made when they started using red-handled tableware for kitchen use only, and silverware for events. Now all tableware gets put away in the correct location, because they've made it easy to do the right thing and hard to do the wrong thing.



Student process improvement coordinators Ari Laiho, Rylie Store, and Anita Paquin use an affinity diagram to organize ideas from a brainstorming session.

Formal Continuous Improvement Events as of April 4, 2017

Executive Team Area	Active as of 4 Apr 17	Completed since last report 21 Jan – 4 Apr 17	Completed FY17 YTD	Completed FY16 Full Year
Academic Affairs	0	3	4	11
Administration	5	1	6	12
Finance	0	0	2	0
Research	2	0	0	0
Student Affairs and Advancement	1	2	3	4
Total	8	6	15	27