

Continuous Improvement Using Lean Principles

May 2014 Update

New Manager of Process Improvement

Ruth Archer has accepted the position of Manager of Process Improvement. Her first day was March 17, 2014. Ruth has relevant experience with continuous improvement concepts, and more importantly, she has worked in positions where she developed skills critical to the desired growth in process improvement at Michigan Tech. Theresa Coleman-Kaiser, who led the search to fill the position, noted "Ruth's teaching experience and academic connections were key considerations in her selection. Additionally, as part of a very rigorous interview process, she gave an excellent teach-back on the topic of standard work that resonated with the invited audience. We're delighted to have her on board." Her experience is enhanced by her Bachelor's degree in Electrical Engineering, which is from Michigan Tech, and her MBA with an Operations Management concentration. Ruth is pleased to be leading this highly skilled team and looks forward to taking on the challenges of the position.



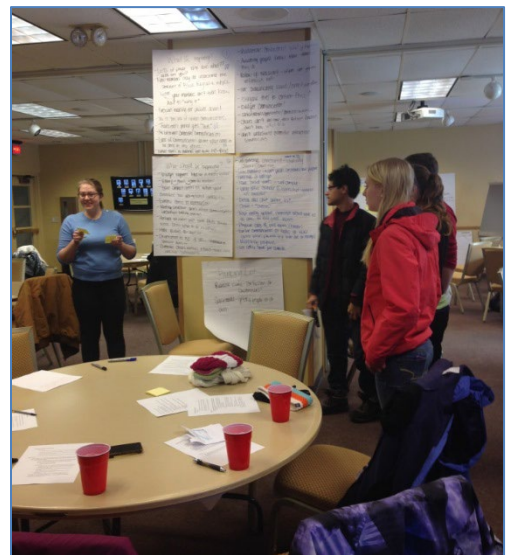
As Manager of Process Improvement, Ruth is responsible for leadership and support of process improvement work. Specifically, Ruth will lead the effort in these areas:

- Establish a recognized continuous improvement curriculum component at Michigan Tech
- Connect learning outcomes for students with industry expectations and then measure effectiveness
- Increase faculty involvement through improvement events, curriculum development, and student organization activities
- Establish an Advisory Council to help inform strategy and develop tactics
- Create training programs to develop new cohorts of Lean Facilitators and to sustain the professional development of current Facilitators and Lean Implementation Leaders.
- Increase new employee exposure to continuous improvement as part of the formal onboarding process
- Leverage current university commitment by pursuing grants and other funding opportunities

Improvement Event Story: LCI assists Blue Key

The new Leaders in Continuous Improvement (LCI) student organization collaborated with Blue Key National Honor Society to help Blue Key improve their processes. On March 2, 2014, members of LCI and four campus Lean facilitators attended a Blue Key meeting and gave a brief introduction to Lean, then facilitated a gap analysis focusing on the internal communication within the organization. Facilitators led small group discussions to define Blue Key's current state of internal communications, what an ideal future state with improved communication would look like, and how the "gap" between these two states could be bridged.

The gap analysis revealed that many of the communication issues within Blue Key occur because members don't know each other or know who to contact when questions come up. Also, it is hard for members to know what is going on with other committees, which can cause frustration when trying to answer questions during office hours. During the gap analysis, it was discovered that many Blue Key committees do not have good timelines or standard work for their processes, which contributes to communication issues.



Going forward, LCI students and campus Lean facilitators will help Blue Key with mapping the value stream for each committee in order to create better timelines and standard work, as well as a potential 5S of the Blue Key office to make the space more functional for its members as they plan Winter Carnival.

Lean Outreach and Connections

- The Local Lean Group met in March. The meeting theme was Metrics and those present shared experiences, best practices, and lessons learned. Twenty-nine local business participate in the group.
- The [Leaders in Continuous Improvement](#) student organization hosted a Six Sigma presentation by Rick Berkey, Industry Projects Manager for the Institute for Leadership & Innovation and a certified Six Sigma Blackbelt. Rick shared information about the history of Six Sigma, some of the principles, certification information and industry examples.
- A new initiative is the [Continuous Improvement Connection](#) in Tech Today, to provide information on campus-wide improvement practices and report on results.
- Theresa Coleman-Kaiser facilitated an improvement event in Lansing via Skype. Theresa has been working with the Michigan Department of Education to revise their scoreboard metrics.

In-Progress Continuous Improvement Events, since October 2013

Area	Number of Events
Academic Affairs	0
Administration	11
Information Services	0
Research	0
Student Affairs and Advancement	2
Other	0
Total	13

FY14 Year-To-Date Continuous Improvement Events

53 Initiated
 13 In Progress
 28 Completed
 1 On Hold
 11 Canceled

Highlighted Improvement Event

Event Name	Event Description
Facilities Management Property Management Value Stream Mapping	Due to changes in personnel locations and responsibilities, there was confusion as to who should be responsible for the property management process for Facilities Management. Adding to this confusion, there was no clear understanding or standards for the current process. The goal of this event was to define the current process and determine an ideal future state. A swim-lane value stream map was used to define the current process, and the team made recommendations for the future state of the property management process within Facilities Management.
Track and Field Clinic Process Mapping	In March 2014, the Michigan Tech Track and Field team hosted their first track clinic for high school students, with the hope of making it an annual event. Since this was their first clinic, there was no process in place for clinic planning or execution. The team, composed of six student athletes and a coach acting as champion, used Lean tools and problem solving techniques to map out their clinic. The team created a process map, including brainstorming the equipment and number of people necessary for each event. A Process Decision Program Chart (PDPC) was used to brainstorm potential issues and determine the best countermeasures for resolving them.