

# Fleming College

## Annual LEAN Report

### 2013 - 2014

#### **YEAR IN REVIEW – Sonia Crook, VP Human Resources and Student Services**

This annual Lean report highlights achievements under each of our six college strategic priorities. Fleming launched its first Lean pilot in 2011. This year we reviewed two new processes, as well as a number of programs in the School of Justice and Business Studies. The recent academic work is part of a Ministry funded pilot to see how Lean can be applied in academic program design. Going forward, it is important that Fleming continues to find ways to focus our efforts on value added work to enhance quality and fulfill commitments made in our Strategic Mandate Agreement.

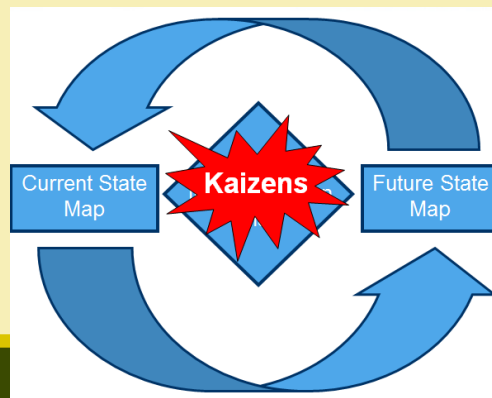
Organizations who embrace Lean typically journey through 5 stages and the process takes many years to ensure that Lean becomes a “*way of life*”. The first two to three years involves moving from a reactive approach with adhoc learning to establishing a formal structure with team learning. At Fleming, stage 2 has now been achieved; the past year has involved the implementation of a formal process for selecting value streams, and broad engagement and training of more than 100 employees. Going forward the college will reach stage 3 which entails deployment with more goal orientation towards our Lean approach. This requires continued focus on embedding Lean in our day-to-day work and carefully selecting value streams to review and track with key metrics. Our recent pilot work in Integrated Program Planning, involving collecting key data for our academic programs, is a good step towards this goal.

“A Lean enterprise is like a school in that it is a teaching and learning organization. The learning is directed towards continuous improvement of how the work gets done in order to serve customers better (Martichenko, 2008)

## WHAT IS LEAN?

Lean is a way to reduce waste and variation in our processes in order to increase value added work. The term was originally coined as “Lean Thinking” by James Womak and Daniel Jones (1996/2003). Lean is really about the problem solving and innovation capabilities in organizations to improve quality, increase efficiencies, eliminate waste and improve the value to our students. Studies have shown that, in a typical organization, only a small fraction of total time and effort actually adds value for the end customer. Who are our clients? Our clients are the students that we serve and the employers and industries who hire them.

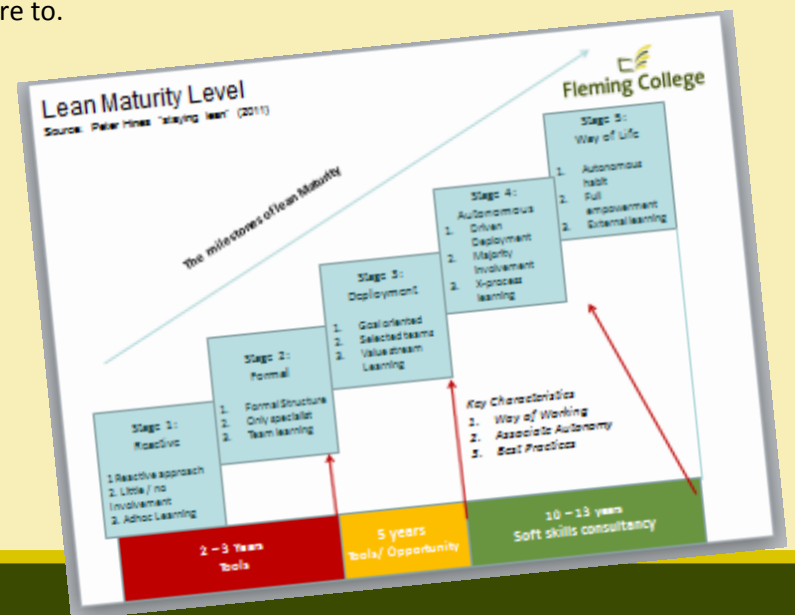
When Fleming takes a Lean Thinking approach we seek to look at how each step within our processes bring value to our clients/students and to eliminate processes that do not add value. This is done through 1) identifying value through the eyes of our customers; 2) mapping the process flow of value; 3) eliminating waste by creating flow or customer pull (what do they demand?), and then 4) perfecting through continuous improvement. The key tool for mapping the flow of work is the value stream mapping process and implementation is achieved through rapid improvement events called Kaizens. By adopting Lean principles, more time will be spent on strengthening strategic work and supporting innovation in how Fleming delivers programs and services to its students. This approach leads to more satisfying work for everyone!



## WHAT IS OUR FOCUS AT FLEMING THIS YEAR?

Our formal value stream Lean work at Fleming started with looking at processes in the service areas (e.g. Student Services etc.), and recently, has spread to academic programs. However, the most important work is the day to day employment of “Lean Thinking” in problem solving and creating efficiencies across the college. There are numerous examples of this, some of which have been highlighted in this report. These are the most important gains because they reflect a problem solving culture.

Culture is an important lever when implementing Lean. Fleming strives to offer a culture where innovation is embraced, efficiencies are gained and success is attained by students and employees alike. However, culture can also be the unseen but powerful obstacle to making change in any organization. As Fleming continues in its Lean journey we will continue to promote problem solving capabilities by all stakeholders, including our students, and we will challenge ourselves to make change through empowerment at all levels to eliminate inefficient processes. This is rewarding! This is the Lean culture we aspire to.



## FLEMING'S STRATEGIC PLAN GOALS

- Achieving Excellence in Student Learning
- Providing Superior Services and Facilities
- Leading in Sustainability
- Growing with Positive Results
- Building Community Success
- Developing the Fleming Working Environment

## OVERVIEW OF NUMBER OF PROJECTS COMPLETED, UNDERWAY & DEFERRED

Our Lean work has crossed the organization in the past year, from Human Resources to Finance and from Student Services to the School of Justice and Business Studies. The breadth of work has included internal processes, academic program design, external partnerships and work with the community. Each of the Fleming's Strategic goals is serviced by these activities.

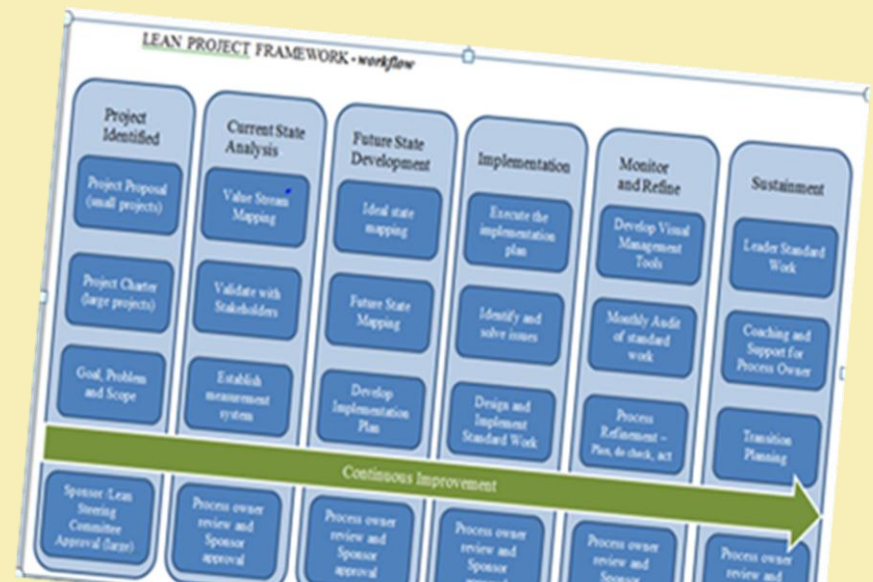
Here's how we did:

- 6 value stream events – 1 deferred
- 8 kaizen (rapid improvement workshop) events
- Over 100 staff, faculty and students involving 7 departments
- 1 community event involving 16 local industry partners from both the private and public sector



## HIGHLIGHTS OF 2013/14 ACCOMPLISHMENTS

- Goal 1 – Achieving Excellence in Student Learning
  - Received a \$140,000 grant to pilot use of Lean tools in the School of Justice and Business Studies for 9 program delivery projects, targeting costs and KPIs
  - Student and graduate involvement in value stream mapping for academic programs to improve quality from the student perspective
  - Faculty workshops as part of CBD training more than 20 faculty in Lean Thinking
  - Worked with local industry, private and public sector partners to design a Lean certification program and quality improvement institute
  - Education Plans – Counselor time on task reduced by 90% with the new process, which allows Coordinators 50%-65% more value added time with students



- Goal 2 – Providing Superior Services and Facilities
  - Completed value stream mapping to redesign the capital planning process
  - Incorporated a new business case process for greater strategic alignment and reduction in waste by eliminating unnecessary projects--identified lead time reduction of 75%
  - Continued success in Add, Drop, Swap student course self-selection – 72% overall success rate (fall,13) with the Evolve system and increased student satisfaction
  - Automated student bursary cheque posting, reducing RO staff processing time from 1-2 weeks to 15 minutes, and automated Continuing Ed calendar to increase accuracy and significantly reduce processing time
  - Education plans for students with disabilities produced in 45% less time (average 15 versus 27 days)
  - Improved process controls and tracking of Student Recruiter Payments
  - Streamlined process and standardized forms for “Gift in Kind” Donations process to eliminate confusion

*“What I appreciate about it most is that it is going to help the student and our biggest concern is student success!” - Scott Fleming, Program Coordinator, Skilled Trades and Technology*

*“It was really great to work with fellow colleagues on positive solutions, to some of the cumbersome processes we complain about but never seem to have the time to fix. I found the current mapping a real eye opener” – Sheila McGrath, Records Specialist, Registrar’s Office*

- Goal 3 – Leading in Sustainability
  - Included Green Value Stream Mapping (waste, composting and energy usage) as part of 5 year Sustainability Plan, with established baseline and target metrics for energy , waste generation, and paper use
  - Trained Office of Sustainability staff in Lean principles
  - Incorporated Life Cycle Analysis into the Capital Planning Lean new business case template
  - Improved and standardized Board of Governor practices to save time, paper and courier costs (reduce carbon footprint) by making packages electronic. New process reduces waste and provides for “just in time” delivery
  - Automated both the e-confirmation of enrolment process for OSAP and RO file management, reducing manual files by 75% and saving significant staff time and paper
- Goal 4 – Growing with Positive Results
  - Increased applied, work integrated learning for the Project Management program by 19% while supporting continuous intake of a strong enrollment program, and reducing face-to-face delivery by 120 hours
  - Included Lean tools and principles in support of the Integrated Program Planning initiative to establish program metrics
  - Automated the (3000 annual) offers of admission to international students -- RO staff saved two hours daily processing time and 6000 letterhead pages annually
  - Streamlined and automated numerous RO processes so that staff have more time to focus on value-added student admissions work

- Established the foundation for the SAIT (Southern Alberta Institute of Technology) partnership for a national Lean quality improvement academy
- Completed a Memorandum of Agreement with The International Center for Studies in Creativity, State University of New York, to infuse innovation and creative thinking into the curriculum developed for the Lean quality improvement academy
- Goal 5 – Building Community Success
  - Conducted a “Voice of the Customer” event to build Lean certification training -- involved 16 local industry partners ranging from the City of Peterborough to Siemens Milltronics
  - Included Lean training as part of our new Manufacturing Operations Certificate program delivered through contract training
  - Met with local Industry partners (Siemens, Peterborough Regional Health Centre etc.) to share best practices in Lean and extending our expertise to support the County of Peterborough
  - Developing a Lean quality improvement academy which will include Lean, creativity and innovation as a focus for local workforce development

- Goal 6 – Developing the Fleming Working Environment
  - Implemented a streamlined and automated process for contract faculty step (pay rate) calculation and reduced the lead time by 43% meaning that new contract faculty receive their contracts sooner
  - Trained 45 faculty and 53 support staff and administration in Lean Thinking
  - Involved 21 faculty and 45 support staff and administration in Value Stream Mapping events
  - Trained 3 faculty and 1 administrative staff as Lean facilitators to build further organizational capacity
  - Launched online learning for staff professional development to save travel and facilitator costs – 609 users have completed 199 online courses
  - Conducted a value stream mapping event to streamline and standardize the recruitment and selection process to reduce extra processing and lead time by 10%
  - Identified and implemented workloading process improvements to establish standard work in reducing unnecessary changes in workloading
  - Lean Steering Committee met 4 times to guide Lean decisions going forward and published 3 Lean communiques to the college community
  - Automated numerous RO processes to free up staff time to focus on more value-added work
  - Automated online nomination for Fleming awards to increase nominations by 120%
  - Streamlined the ELT meeting planning process to reduce waste and improve meeting efficiency

*“Designing a new template for use across multiple programs is a tough task-daunting because of the variety of needs for individual programs...working through established ED plans and deciding what worked or what was lacking of each helped us shape the current template!” - Thom Luloff, Faculty, SENRS*

## STAFF ENGAGEMENT

Events by employee group – Value Stream Mapping, Kaizens and Voice of the Customer.

Events	Faculty	Administration	Support Staff	Students/Grads/ Community
Recruitment and Selection Lean		5	7	
Capital Planning Lean		5	9	
Project Management Program	7			3
Add Drop Swap Kaizen Event		2	4	
Employment Services		1	7	
Employee Entry Exit Process		3	8	
Academic Operations – workloading Kaizen		4	6	
Common First Year – business programs value stream mapping	16	2		3
Lean Academy Voice of the Customer Event	3	3		16

*“I have already seen that there is so much we can learn from Lean practices in terms of curriculum design and development. Through the adoption of continual improvement principles, we can provide our students with learning opportunities that are relevant, authentic, and efficient. And while it might seem contradictory for a process that has efficiency as its end goal, I have seen some of the best examples of student-centred learning emerge from the Lean projects taking place in the School of Business”.*

*Wendy Morgan, Curriculum Consultant*

*“We could never have achieved this without this process!”*  
*Raymond Yip Choy, Faculty and Program Coordinator*

## LINKS

### Lean Updates:

March 24, 2014 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

October 15, 2013 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

April 29, 2013 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

February 12, 2013 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

December 5, 2012 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

October 19, 2012 - <https://department.flemingcollege.ca/hr/staff-development/lean/.PDF>

# Outcome – Future State

## Project Management ( PMG )

Fleming College  
OUR COURSEWORK | OUR SKILL | OUR SUCCESS

**Sem 1** – Students take 7 foundational courses and are assigned a project team and a project. During this time, they use the concepts and skills learned in the courses to initiate and plan their project

MGMT 180	MGMT 181	MGMT 183	MGMT 182	MGMT 188	MGMT 189	ACCT 90
Principles of Project Management	Project Management Tools & Techniques	Project Planning and Scheduling	Project Scope, Quality & Risk	Managing change	Procurement & Contract Management	Project Cost Management

↓

**Sem 2** – In their project teams, students execute and close their projects. They take three courses that provide them with high level management perspectives that allow them to contribute at a more senior level.

MGMT 225	MGMT 226	MGMT 227	APST 132
Leadership & Management	Corporate Social Responsibility in a Global Environment	Best practices in Project Management	Applied Project. Dedicated time to execute the project that was initiated and planned in Sem 1. project teams are assigned faculty mentors and will be required to work closely with their clients and sponsors.

**CLASS.WORK.** BRINGING THE REAL WORLD TO THE CLASSROOM.

1