

# **INNOVATION CONFIGURATION**

Lean Six Sigma

2018 - 2022

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Course Group Number: 39001879

# **Purpose**

These workshops cover the basics of the Lean Six Sigma methodology for process improvement and performance excellence as practiced by many Fortune 500 Corporations. Lean Six Sigma is used to foster a culture of continuous improvement (Kaizen) for organizations to reduce waste, while increasing efficiency, value, and quality. Dr. Deborah Posner, the presenter of these workshops, is a Lean Six Sigma Black Belt. She will share how she has successfully integrated this framework to enhance operational efficiency within the education sector and beyond.

Participants will have opportunity for hands-on practice applying a Lean Six Sigma tool for process improvement, and will learn the fundamentals for supporting process improvement projects in their departments through the proven steps of the DMAIC model (Define, Measure, Analyze, Improve, Control). Upon passing the online exam within 1 week after the workshop, participants will receive a frameable certificate and digital badge to display their new credential. NOTE: This series includes White or Yellow Belt.

Lean Six Sigma is recognized as a tool for operational efficiency as well as an enterprise-wide business strategy with direct bottom line impact. As a quality enhancement framework, Lean Six Sigma focuses on continuous improvement strategies and tactics to eliminate waste, reduce variance, increase productivity, and achieve breakthrough results in business excellence. The overall objective for the Lean Six Sigma workshops is to equip District employees with industry-proven philosophies for streamlining business processes, enhancing customer service, implementing and tracking process improvement projects, and transforming culture.

# Needs Assessment

Below is a snapshot of the latest version of the 2016-19 Strategic Plan Dashboard in Power BI, representing the goal of Continuous Improvement. Current progress as benchmarked against peer districts reporting through CGCS (Council of the Great City Schools), as well as our own internal metrics, continue to show ongoing opportunities for continuous improvement across the District. Baseline and target data, as well as performance toward the target goals set at the time this Innovation Configuration was created, are included below.

The District's prior three-year Strategic Plan came to a close on June 30, 2019 and has given way to the District's five-year 2024 Strategic Plan. While Continuous Improvement is no longer one of the three Strategic Goals of the new 2024 Strategic Plan, it is embedded throughout all aspects of the plan and activities underway to implement it with fidelity. In this regard, the current level of performance for this Innovation Configuration consists of gains made across the Safe & Supportive Environment Strategic Goal of the 2024 Strategic Plan, as well as improved implementation of all Initiatives of the 2024 Strategic Plan. The Operational & Process Improvement Initiative in the new 2024 Strategic Plan is particularly affected in a positive way by this Innovation Configuration and will be even more so in the years to come – specifically, as of the end this year, course participants reported saving a combined total of over 2,000 hours per week (this includes all participants in all course sections ever offered).



#### **Operational Efficiencies**

Percentage of business/support service KPI's in top quartile

25	30	35	40
26	2	25	40
Baseline	Currer	nt Status	Target

#### Student-to-computer ratio (decrease)

0	0.5	1	1.5	2	2.5		
	6		2.0		3.5		
Ba	seline	Ci	Target				
Increas	Increase 5-year retention (teachers)						



Current Status

Target

= Year 1 = Year 2 = Year 3

Baseline



# Strategic Plan Dashboard

### **Goal: Continuous Improvement**

#### Strategic Initiative Management

Percentage of project leads attending formal training

0	20	40	60	80
0	69			90
Baseline	Current Status			Target

Number of strategic initiatives formally tracked

0 2 4 6 8 10 0 10 10 Baseline Current Status Target Performance management and evaluation processes

0	5	10
0	15	12
Baseline	Current Status	Target

# Strategic Plan Dashboard

### Goal: Continuous Improvement

#### Strategic Initiative Management



Performance management and evaluation processes



Year 1 \*Includes key performance indicators across multiple areas of focus. Source: Council of the Great City Schools Benchmarking for K-12 Year 3 Operations
\*\*Computer defined as desktop, tablet, or laptops

\*\*\* Project that is active and in planning, design, or construction phase

Select other Strategic Plan Goals from tabs below

#### Based on data available as of 8/7/2018.

#### **Facilities and Construction**

Facility-related projects underway in the SMART program

40	60	80	100
35	1	00	90
Baseline	Current Status		Target

Facility-related projects in construction procurement, construct...

	20	40	60
7		30	60
Baseline		Current Status	Target

Decrease in work order completion time (days decreased)

0	1	2	3	4
39		35		35
Baseline	2	Current Status		Target

Decrease in routine maintenance cost per work order (\$ saved)

673	10	<sup>20</sup> 551	30	40 633
Baseline		Current Status	;	Target
		Based on data avai	lable as of	7/17/2019.

#### Facilities and Construction

Facility-related projects underway in the SMART program \*\*\*

40	60	80	100
35	1	00	90
Baseline	Curren	nt Status	Target

		-		_	
60	50	40	30	20	10
60		4	5		7
Target		t Status	Curren		Baseline

Decrease in work order completion time (days decreased)



### **Desired Outcomes**

The tables on the following pages describe the Desired Outcomes for professional learning in support of this Innovation Configuration. A summary of Desired Outcomes is below:

### 1.0 Individuals

- **1.1** Recognize basic Lean Six Sigma terminology, methodology, tools, and benefits.
- **1.2** Identify how Lean Six Sigma can be used as a framework for fostering a culture of continuous improvement in public education.
- **1.3** Apply a Lean Six Sigma process improvement tool through a hands-on case study.

# **Desired Outcomes and Performance Indicators**

1.0 Individual							
1.1 Desired Outcome: Recognize basic Lean Six Sigma terminology, methodology,							
tools, and benefits.							
		e Indicators					
Level 4	Level 3	Level 2	Level 1				
Recognizes all major components of the Lean Six Sigma fundamentals.	Recognizes most of the major components of the Lean Six Sigma fundamentals.	Recognizes some of the major components of the Lean Six Sigma fundamentals.	Unable to recognize any of the major components of the Lean Six Sigma fundamentals.				
Demonstrates knowledge of the most commonly used methodology and tools in this framework.	Demonstrates knowledge of some of the commonly used methodology and tools in this framework.		iunumentuis.				
Able to clearly articulate the benefits of Lean Six Sigma for process improvement.							
	: Identify how Lean Si continuous improver	0					
0	<b>A</b>	e Indicators					
Level 4	Level 3	Level 2	Level 1				
Demonstrates clear understanding of all aspects of the DMAIC model (Define, Measure, Analyze, Improve, Control) for process improvement.	Demonstrates general understanding of most aspects the DMAIC model (Define, Measure, Analyze, Improve, Control) for process improvement.	Demonstrates general understanding of some aspects the DMAIC model (Define, Measure, Analyze, Improve, Control) for process improvement.	Unable to recognize any aspects the DMAIC model (Define, Measure, Analyze, Improve, Control) for process improvement.				
Able to clearly articulate the benefits of Lean Six Sigma for change management.	Able to articulate some of the benefits of Lean Six Sigma for change management.						
Recognizes clear opportunities for applying Lean Six Sigma in public education.							

1.3 Desired Outcome: Apply a Lean Six Sigma process improvement tool through a hands-on case study.

Performance Indicators							
Level 4	Level 3	Level 2	Level 1				
Recognizes all key components of the process improvement tool.	Recognizes most key components of the process improvement tool.	Somewhat able to apply the process improvement tool for a given problem.	Unable to apply the process improvement tool for a given problem.				
Able to successfully apply the process improvement tool for a given problem.	Mostly able to apply the process improvement tool for a given problem.						
Works effectively in a cooperative learning group to apply a process improvement tool.							

# **Data Collection Plan: Individuals**

Level of Measurement	Instrument/Data Type	Frequency	Person Responsible for Collecting Data
1. Participants' Learning Outcomes	Attendance	Day of workshop	Peter Eschenbrenner, Office of Strategic Initiative Management
	Exam	1 week after workshop	
2. Participants' Reactions	Workshop Feedback Survey	1 week after workshop	Peter Eschenbrenner, Office of Strategic Initiative Management
3. Organizational Supports	District records on progress of SIM Process Improvement Projects	Annually	Peter Eschenbrenner, Office of Strategic Initiative Management
4. Participants' Practice	Follow-up Reflections Survey	6 months after workshop	Peter Eschenbrenner, Office of Strategic Initiative Management

# **Evaluation Plan**

Area of Impact	Formative Assessment	Summative Assessment
Process Improvement Knowledge	<ul> <li>Facilitator observations</li> </ul>	Attendance
	<ul> <li>Collaborative learning activity</li> </ul>	Exam results
	<ul> <li>Participant Feedback Survey</li> </ul>	Follow-up Reflections Survey