Student Workbook

Lean Six Sigma Awareness Certification

Module 1 - What is Lean Manufacturing

💡 Reflection

Can you think of a process or product in your life that can be improved using the Lean approach? Things to consider:

- How you get ready in the morning
- A meal you prepare in your home
- A process you do in your part time job

How would you define and describe the Lean approach?

Module 1 - 1: The Principles of Lean

What are the Five (5) Principles of Lean?

1.
2.
3.
4.
5.

Module 1 - 2: What is 'Waste' in Lean?

What are the Eight (8) Wastes in Lean?

1.
2.
3.
4.
5.
6.
7.
8.

💡 Reflection

Can you think of a process or product in your life that can be improved by eliminating waste?

Choose one of the '8 Wastes', describe what type of waste would you eliminate and how would you go about doing that?

Things to consider:

- **How you get ready in the morning**
- **A meal you prepare in your home**
- **A process you do in your part time job or completed at a co-op placement**

Waste:_____
Describe solution:

Module 1 - 3:

💡 Reflection

What is your favourite Lean methodology? Describe why you chose it as your favourite - why do you think it appeals to you?

Module 2 - What is Six Sigma?

💡 **Reflection**

After this introduction, what questions or wonderings do you have about Six Sigma?

Module 2 - 1: What is DMAIC?

Can you think of a problem in your life that can be improved using DMAIC? Refer to the 'Cleaning Your Garage' example and complete the chart below in your Student Workbook.

Problem:	
DEFINE	
MEASURE	
ANALYZE	
IMPROVE	
CONTROL	

Module 2 - 3: The 5 Whys and Fishbone Diagram

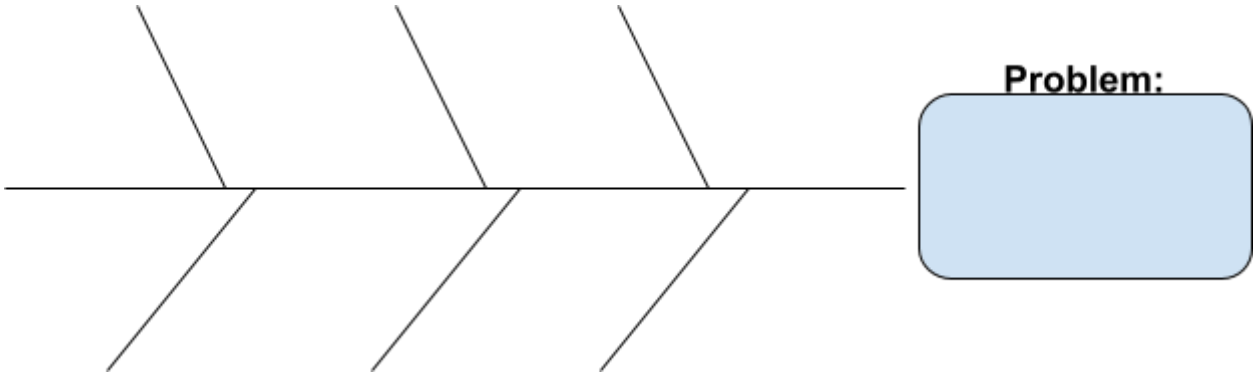
Identify a real problem in your life, and use the '5 Whys' method to drill down to the possible cause of the problem. Record your answers to each of the 'Whys'. Add extra 'Whys' if needed. Remember, getting the problem might take more than '5 Whys'!

Problem:

5 Whys:

1.
2.
3.
4.
5.

Identify a real problem in your life, and use the fishbone diagram to brainstorm possible causes of the problem. (Must be a different problem than the 5 Whys).



Module 3 - What is Lean Six SIgma?

💡 **Reflection**

After reading three of Shigeo Shingo's quotes, pick one and describe it in your own words. Give an example of how you might apply this in your own life to improve a process.

Module 4 - Applying Lean Six Sigma in the Workplace

Now that you know a lot more about Lean Six Sigma and have seen it applied in the various settings, describe three (3) Lean Six Sigma improvements you think can be made at your school.

1.
2.
3.

Module 5 - Lean Customer Experience

💡 **Reflection**

Think about a time when you tried to help improve something for someone else.

It could have been fixing someone's buggy phone, improving a meal that's being cooked, or helping a friend with a problem. Maybe it was a challenge you helped with when volunteering, working part time or at a co-op placement.

When you improved something, you asked yourself, "How can I make this better for **<insert someone else's name>**?"

Using terminology from the Voice of the Customer video, what kinds of methods did you use to understand the 'voice of the customer' in this situation, in order to help/improve?

Module 6 - Lean Across SHSM Sectors

What I learned about Lean in a specific SHSM sector:

Please submit this completed Student Workbook to your SHSM Lead so that they may issue you a certificate of completion for the Lean Sigma Six Certification.