



# MANUFACTURING CLUSTER

## LESSON 3

<b>Lesson Plan Title:</b> Where is the Bottleneck?		<b>Instructor:</b>
<b>Suggested Total Time for Lesson (minutes):</b> 45-90 minutes		
<b>Content Focus - What Will Students Learn? (Content Skill Sets)</b>		
0972.MA.1863.1 Demonstrate a knowledge of Manufacturing Technologies		
<b>Materials and Resources- What do you need to assemble and prepare before the lesson?</b>		
<b>Materials:</b> <ul style="list-style-type: none"> <li>• 3 timers</li> <li>• 5 small boxes with candies per grouping</li> </ul>		<b>Resources:</b> <ul style="list-style-type: none"> <li>• <i>Activity Theory of Constraints Simulation (Where is the Bottleneck)</i></li> </ul>
<b>Lesson Outline: What learning activities will your students do?</b>		
<b>Time</b>	<b>Sequence/Description of Learning Activity</b>	
10-15 minutes	<b>Get Started/Explain:</b> Teacher will explain that in this activity students are working to identify methods for improving processes so that they maximize throughput in a system.	
20 minutes	<b>Discover/Engage/Practice:</b> <i>In teams of 3 students will self-assign duties:</i>  A. Get Box & Empty It B. Count & Fill C. Return Box to Facilitator	
5 minutes	<b>Check for Understanding/Summarize/Close:</b> Students will evaluate the varies paces of process and how that effected efficiency. Students will reflect on what they feel was the optimal output through their trials. Students will connect activity to their personal lives.	
<b>Modifications, Support, and Extensions (for those students with IEP)</b>		
<b>Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?</b>		