

Gerald Kendall, Principal  
TOC International  
1053 Deer Path Lane  
Gatlinburg, TN 37738 USA  
Office: +865-430-3128  
Email: Gerrykendall@tocinternational.com

### **Multitasking Exercise**

1. Give each person two sheets of 8.5x11 paper of two different colors.
2. Tell them that we will simulate their work environment examining the impact of working on two tasks with and without multitasking. We will measure both time duration to complete both orders and quality.
3. Tell them that to process an order, they will take the first colored sheet of paper and make 5 vertical tears of approximately the same width, giving them 6 strips (demonstrate for them). Then they will take each of the 6 strips and make 4 tears, giving 5 pieces per strip. NOTE – each strip must be torn individually – they are not allowed to group strips together and tear multiple strips at once. For the first sheet, that would make a count of 30 if they did this perfectly (quality perfect). Follow a similar process for the second sheet, but make 6 vertical tears giving 7 strips. Take each of the 7 strips and make 5 tears, giving 6 pieces per strip. Perfect quality would mean a count of 42 on the second sheet.
4. First simulation – multitasking: Start a clock preferably on an lcd projector so they can see the time. Do 4 operations (tears) on one color sheet, switch to 4 operations on the other color sheet, switch back and forth between sheets until finished. Make sure that they don't tear multiple strips in one operation. Have them scream out their time when finished. When they are finished, have them count the # of pieces in each order. Both orders correct – 2 check marks for quality, 1 order correct – 1 check mark, neither order correct – 0 check marks.

5. Have a 3 column matrices on the board where you record the number of people finished in each time interval for this exercise and the last column will be for # of people finished in that time interval for the 2<sup>nd</sup> exercise (no multitasking). The time intervals should start at 1 minute and progress in 15 second intervals. So the matrix would appear as:

<b>TIME</b>	<b>First Exercise</b>	<b>Second Exercise</b>
1:00		
1:15		
1:30		
1:45		
2:00		
2:15		
2:30		
2:45		
3:00		

6. Also record quality count and let them know the quality % compared to total potential. E.g., if 10 people participated, a perfect quality count would be 20, which would be 100%. If the actual quality count was 3, then quality was 15%.
7. The second exercise is the same as the first except NO multitasking. Do all operations on the one sheet, then do all operations on the second sheet.

Based on typical results running this exercise, with multitasking you can expect quality below 20% and time durations 2 minutes and up. Without multitasking, quality typically increases to 95% and time durations are less than half.