**Instructor Notes – Chapter 10. Standard Costs**

1. If you are a golf fan, you know that the score is measured in terms of par. If a hole has a par of 4, you compare the strokes you used to get the ball in the hole. If you required 5 strokes, you are one over par, etc. If your score is equal to par, you are a pretty good golfer.
2. **Example – Manufacturer of Desks.** With Standard Cost accounting, the standard cost for lumber for a particular desk is $20.00. This is made up of: (1) a standard quantity of lumber for each desk and (2) a standard price per unit of lumber.   
   Let’s assume the specifications for the desk call for 10 feet of lumber (standard quantity) and our standard price of lumber is $2.00 per foot (standard price). That results in a standard cost of $20.00 for lumber for each desk.
3. If you are spending more than $20.00 per desk for lumber, you are either:  
   **1**. Paying more than $2.00 per foot for the lumber, or **(price variance)**  
   **2.** Using more than 10 feet of lumber per desk, or **(quantity variance)**  
   **3.** Both.
4. If we used 10 feet per desk, and we paid $2.50 per foot for the lumber, we had an unfavorable **materials price variance** of $.50 per foot. If we used 50,000 feet of lumber, we have an unfavorable price variance of $25,000. If we use more (or less) than 10 feet of lumber per desk, we have an unfavorable (or favorable) **quantity variance**
5. **The cost of factory labor** (to cut the lumber and assemble the desks) can be analyzed in the same manner, with a standard rate per hour ($15) and a standard amount of labor time devoted to making one desk (2 hours). That will yield a standard cost for labor of $30 per desk.   
   If you are spending more than $30.00 per desk for labor, you are either:  
   1. Paying more than $15.00 per hour for labor, or **(rate variance)**  
   2. Using more than 2 hours of labor per desk, or **(efficiency variance)**  
   3. Both.
6. Overhead is more challenging to analyze, because it cannot be measured in the manner that we measure materials or labor. We can keep time records for labor (for each job), and materials usage records for materials (for each job).
7. **Variable factory overhead is a cost of supporting labor.** It may include power to run the factory machinery, cleanup costs, machine repair costs, temperature control (cooling or heating), etc. We often use a less precise way of allocating variable overhead to specific products. We estimate the total amount of overhead to be incurred, and then assume it is incurred proportionately with the application of labor effort. If we expect to have variable overhead of $80,000, and plan to work 40,000 hours, we can say that overhead is applied at the rate of $2.00 per labor hour, etc.
8. Since variable overhead is a support cost for labor, if our labor is being used inefficiently (actual hours worked are more than standard hours), we were wasting both labor dollars and variable overhead costs. Inefficient labor usage results in an unfavorable efficiency variance for labor and an unfavorable variable overhead. Of course a favorable variance is the goal, and is possible.
9. **Fixed overhead is even more difficult to analyze**. If factory rent is $100,000 per period and we work 5,000 hours per period, we will allocate **fixed overhead** at the rate of $20 per hour. If we increase our estimate of hours to be worked to 10,000, the hourly rate goes down to $10 per hour.
10. We will analyze problems, compute the variances, and discuss the meaning of those variances. We will talk about how to realize favorable variances and avoid unfavorable variances.
11. **Most Important** – we will focus on how to identify ways to reduce costs and waste, compete more effectively in the market, and increase profitability of the company.