

Fourth Grade

Cost Accounting system 2

Week (7)

Lecture (6) 21 March 2020

Journal Entries Using Standard Costs

Journal Entries Using Standard Costs

- We will now illustrate journal entries for Webb Company using standard costing. The focus is on **direct materials** and **direct manufacturing labor**.

Notes:

- We will depend on numbers we calculated last lecture for variances (price and efficiency)
- *In each of the following entries,*
 - 📖 **Unfavorable** variances are always **debits** (they **decrease** operating **income**), and
 - 📖 **Favorable** variances are always **credits** (they **increase** operating **income**).

Learning objectives:

Last week we explained entry (1)

Journal entry for price and efficiency variance of direct material

Today we will explain:

- Journal entry for price and efficiency variance of direct manufacturing labor
- Understand how managers use variances

Journal entry 2

- Journal entry for price and efficiency variance of direct manufacturing labor

Level 3 Analysis

	Actual Costs Incurred (Actual Input Quantity × Actual Price) (1)	Actual Input Quantity × Budgeted Price (2)	Flexible Budget (Budgeted Input Quantity Allowed for Actual Output × Budgeted Price) (3)
Direct Manufacturing Labor	(9,000 hours × \$22/hr.) \$198,000	(9,000 hours × \$20/hr.) \$180,000	(10,000 units × 0.8 hr./unit × \$20/hr.) \$160,000
Level 3		\$18,000 U Price variance	\$20,000 U Efficiency variance
Level 2		\$38,000 U Flexible-budget variance	

Accounts:

- Working-in process (debit) (**\$ 160,000**) (**budgeted rate and budgeted number of labor hrs**)
- Price variance unfavorable** (debit) (\$18,000)
- Efficiency variance unfavorable** (debit) (\$20,000)
- Wage payable control (credit) what is actually paid to worker (**\$ 198,000**) (measures the actual amounts payable to workers based on the actual hours they worked and their actual wage rate.)

Accounts:

Working-in process (debit) (**\$ 160,000**) (**budgeted rate and budgeted number of labor hrs**)

Price variance unfavorable (debit) (\$18,000)

Efficiency variance unfavorable (debit) (\$20,000)

Wage payable control (credit) what is actually paid to worker (**\$ 198,000**) (measures the actual amounts payable to workers based on the actual hours they worked and their actual wage rate.)

2. Work-in-Process Control

(10,000 jackets \times 0.80 hour per jacket \times \$20 per hour) 160,000

Direct Manufacturing Labor Price Variance

(9,000 hours \times \$2 per hour) 18,000

Direct Manufacturing Labor Efficiency Variance

(1,000 hours \times \$20 per hour) 20,000

Wages Payable Control

(9,000 hours \times \$22 per hour) 198,000

This records the liability for Webb's direct manufacturing labor costs.

Written off Variance Accounts

- If the variance accounts are immaterial in amount at the end of the fiscal year, they are written off to the cost of goods sold.

Webb would record the following journal entry to write off the direct cost variance accounts to the Cost of Goods Sold account.

Writing of the variance means that:

- the *debited* variance account should record to be *credit* account and vice versa
- the *credited* variance account should record to be *debit account*

As shown in following slide

1a.

Direct Materials Control

(22,200 square yards \times \$30 per square yard)

666,000

Direct Materials Price Variance

(22,200 square yards \times \$2 per square yard)

44,400

Accounts Payable Control

(22,200 square yards \times \$28 per square yard)

621,600

This records the direct materials purchased.

1b.

Work-in-Process Control

(10,000 jackets \times 2 yards per jacket \times \$30 per square yard) 600,000

Direct Materials Efficiency Variance

(2,200 square yards \times \$30 per square yard)

66,000

Direct Materials Control

(22,200 square yards \times \$30 per square yard)

666,000

This records the direct materials used.

2. Work-in-Process Control

(10,000 jackets \times 0.80 hour per jacket \times \$20 per hour)

160,000

Direct Manufacturing Labor Price Variance

(9,000 hours \times \$2 per hour)

18,000

Direct Manufacturing Labor Efficiency Variance

(1,000 hours \times \$20 per hour)

20,000

Wages Payable Control

(9,000 hours \times \$22 per hour)

198,000

This records the liability for Webb's direct manufacturing labor costs.

Cost of Goods Sold

Direct Materials Price Variance

Direct Materials Efficiency Variance

Direct Manufacturing Labor Price Variance

Direct Manufacturing Labor Efficiency Variance

59,600

44,400

66,000

18,000

20,000

Cost of Goods Sold	59,600	
Direct Materials Price Variance	44,400	
Direct Materials Efficiency Variance		66,000
Direct Manufacturing Labor Price Variance		18,000
Direct Manufacturing Labor Efficiency Variance		20,000

You have learned how:

- *standard* costing and
- *variance analysis* help managers focus on areas *not* operating as expected.

Journal entries

The journal entries here point to another advantage of standard costing systems:

- Standard costs **simplify** product costing. As **each** unit is **manufactured**, costs are **assigned** to it using the **standard** cost of **direct materials**, the standard cost of **direct** manufacturing **labor**.

Variance Analysis

From the **perspective** of **control**, variances should be isolated at the **early** possible **time**.

For example, the **direct** materials **price variance** should be calculated at the time materials are **purchased**. By doing so, managers can take **corrective actions** immediately when a large unfavorable variance is known rather than waiting until after the materials are used in production.

- **These corrective actions such** as:
 - trying to obtain cost reductions from the firm's current suppliers or
 - obtaining price quotes from other potential suppliers—

➤ Understand how managers use variances:

- ❖ Management's Use of Variances
- ❖ Multiple Causes of Variances
- ❖ Using Variances for Performance Measurement

Management's Use of Variances

- Managers and management accountants use variances to **evaluate** performance after decisions are implemented, to trigger organization learning, and to make continuous **improvements**.
- Variances serve as an early **warning** system to alert managers to existing problems or to prospective opportunities.
- When done well, variance analysis enables managers to evaluate the **effectiveness** of the actions and performance of personnel in the current period, as well as to fine-tune strategies for achieving improved performance in the future.

Multiple **Causes** of Variances

To interpret variances correctly and make appropriate decisions based on them, managers need to recognize that variances can have *multiple causes*.

- Managers must not *interpret* variances in isolation of each other.
- The causes of *variances* in one *part* of the value chain can be the *result* of decisions made in *another* part of the value chain.

Consider an *unfavorable* direct *materials* efficiency *variance* on Webb's production line.

Possible operational *causes* of this variance across the value chain of the company are:

1. *Poor* design of products or *processes*
2. Poor work on the *production* line because of under *skilled* workers or *faulty* machines
3. *Inappropriate* assignment of *labor* or machines to specific jobs
4. *Congestion* due to *scheduling* a large number of rush orders placed by Webb's sales representatives
5. Webb's cloth *suppliers* not manufacturing materials of *uniformly high* quality

Using Variances for Performance Measurement

Managers often use *variance* analysis when evaluating the performance of their employees or business units.

Two attributes of performance are commonly evaluated:

1. **Effectiveness**: the degree to which a predetermined objective or target is met, such as: the sales, market share, and customer satisfaction ratings of Ready Brew line of instant coffees.
2. **Efficiency**: the relative amount of inputs used to achieve a given output level.

For example, the smaller the quantity of Arabica beans used to make a given number of VIA packets, the greater the efficiency.



The End