Financial Statement Line Item Relationships

Unit: Critical Thinking and Analysis

Problem Area: Financial Information Interpretation

Lesson: Financial Statement Line Item Relationships

Student Learning Objectives. Instruction in this lesson should result in students achieving the following objectives:

1. **Interpret balance sheets.**
2. **Interpret income statements.**
3. **Interpret statement of cash flows.**
4. **Interpret statement of owner's equity.**

Resources. The following resources may be useful in teaching this lesson:

E-unit(s) corresponding to this lesson plan. CAERT, Inc. http://www.mycaert.com.

"Accounting Relationship: Linking the Income Statement and Balance Sheet," *Money Instructor.* Accessed Aug. 17, 2016. http://content.moneyinstructor.com/1496/linking-income-balance.html.

"How Are the Financial Statements Linked Together?" *Wall Street Prep.* Accessed Aug. 17, 2016. https://www.wallstreetprep.com/blog/how-are-the-financial-statements-linked-together/.

"Relationship Between Financial Statements," *Accounting-Simplified.com.* Accessed Aug. 17, 2016. http://accounting-simplified.com/financial/statements/links-and-relationships.html.

"The Relationship Between Financial Statements," *Investopedia.* Accessed Aug. 17, 2016. http://www.investopedia.com/walkthrough/corporate-finance/2/relationship-financial-statement/relationship.aspx.

Equipment, Tools, Supplies, and Facilities

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

Key Terms.

The following terms are presented in this lesson (shown in bold italics):

- accounting period
- accrual basis of accounting
- asset
- balance sheet
- cash basis of accounting
- cash flow statement
- cost of goods sold
- dividends
- drawing
- financial statement
- financing activities
- general and administrative expenses
- gross profit
- income statement
- investing activities
- liability
- net income
- net loss
- operating activities
- owner contributions
- owner's equity
- selling expenses
- statement of cash flows
- statement of owner's equity
- statement of retained earnings
- supplemental information

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

> *Explain that a company's financial statement tells a story. Ask: What can we learn by reading financial statements? Explain that they should indicate the company's financial health and display the results of operations for a certain period of time. The four main financial statements are the balance sheet, income statement, statement of owner's equity (retained earnings statement), and the statement of cash flows. Each of these statements serves a purpose in telling the company's story. However, the statements do not stand alone. The four statements are interrelated and, together, give a more complete picture of a company's financial health.*

CONTENT SUMMARY AND TEACHING STRATEGIES

Objective 1: Interpret balance sheets.

Anticipated Problem: How can balance sheets be interpreted?

I. Balance sheet interpretation

A. A ***financial statement*** is a series of reports that summarize the business's financial results, condition, and cash flows. The financial statement tells the story of the company's operations and financial health. It is important to remember that an individual financial statement should not be viewed in isolation. Instead, it should be viewed as part of the whole set, which includes the balance sheet, income statement, statement of cash flows, and statement of owner's equity.

B. A ***balance sheet*** is the part of the financial statement that reports the assets, liabilities, and owner's equity at a specific point in time. In essence, the balance sheet reflects the accounting equation: Assets = Liabilities + Owner's Equity.

1. An ***asset*** is a resource that has economic value and an expectation of providing future benefits. Cash, accounts receivable, inventory, property, plants, and equipment are assets. The asset section of the balance sheet presents all that the business owns. An asset is valued at its historical cost.
2. ***Liability*** is financial debt or obligations that occur as part of doing business. A liability is something the business "owes" and includes:
   a. Accounts payables to vendors
   b. Notes payable
   c. Unearned revenue

3. ***Owner's equity*** is the amount remaining after the value of all liabilities is subtracted from the value of all assets. It is the capital available to owners. Owner's equity may be viewed as the owner's share of the assets. The formula to calculate owner's equity is: Assets – Liabilities = Owner's Equity. Whatever the company owns minus whatever the company owes to others is what is left for the owners. Owner's equity reported on the balance sheet is computed as follows:

   Beginning Owner's Equity
   \+ Owner Contributions
   \+ Net Income or – Net Loss
   – Owner Withdrawals (drawing or dividends)
   Owner's Equity Balance Reported on Balance Sheet

4. The balance sheet is related to other financial statements in several ways.
   a. The inventory balance included in total assets of the balance sheet is used as part of the income statement's calculation of cost of goods sold (COGS).
   b. The total owner's equity displayed must be calculated by adding in the net income calculated on the income statement.
   c. All adjusting entries include an adjustment to one balance sheet account and one income statement account. Whenever the balances of prepaid expenses are adjusted to reflect the balance for the end of the period, an expense account on the income statement is also adjusted. Whenever unearned revenue (a liability) is adjusted, a revenue account on the income statement is also adjusted.
   d. Changes in account balances on the balance sheet are reflected in the reconciliation of the cash flow statement.

Teaching Strategy: *Many techniques can be used to help students master this objective. Use VM–A and VM–B.*

Objective 2: Interpret income statements.

Anticipated Problem: How can a person interpret income statements?

II. Income statement

A. The ***income statement*** is the part of the financial statement that reports a company's financial performance over a specific period of time. It is referred to as the profit and loss statement or P&L. The income statement may be simple and report on income and expenses, or it may include computations of costs of goods sold (COGS) and subcategories of expenses. On the income statement, expenses are subtracted from revenue to calculate the net income or net loss for the period. The ***accounting period*** is the timeframe for which the company is reporting the results of its operations. Generally, the accounting period is a month, a quarter (three months), or one year.

1. Section 1 of the income statement is the revenue (income) information. This is where the company reports sales or service revenue for the period.
2. Section 2 of the income statement is expenses information. Depending on business type or size, this section may be extremely detailed. For example:
   a. If it is a merchandising business, a cost of goods sold section will be included on the income statement. ***Cost of goods sold*** is the total original price of all the merchandise sold during a fiscal period. COGS is calculated as: Beginning Inventory + Purchases – Ending Inventory = Cost of Goods Sold.
   b. If a company is a merchandising business and calculates COGS, it will also calculate gross profit. ***Gross profit*** is the revenue remaining after the cost of merchandise sold is deducted. Gross profit is calculated as: Sales – COGS = Gross Profit. In addition, the other expenses of the business may be reported in subcategories.
   c. ***Selling expenses*** are the costs incurred by the business related to selling and distributing the product to customers. These expenses may include marketing, sales commissions, salaries, and sales office expenses.
   d. ***General and administrative expenses*** are the costs incurred by the business in conducting its day-to-day business operations. These expenses may include office salaries, accounting fees, insurance costs, supply costs, etc.
3. Once revenues and expenses are reported on the income statement, net income is calculated. ***Net income*** is the difference between total revenue and total expenses when total revenue is greater. Net income is calculated as: Revenues – Expenses = Net Income. If expenses are greater than revenues, the company will report a net loss. ***Net loss*** is the difference between total revenue and total expenses when total expenses are greater.

B. The income statement is related to the other parts of a financial statement in several ways.

1. The net income from the income statement is used to calculate owner's equity on the statement of owner's equity. In addition, owner's equity is reported on the balance sheet in the owner's equity section.
2. Net income is the first line reported in the cash flows statement and is used to calculate cash flows from operations.

Teaching Strategy: *Use VM–C to lead a discussion.*

Objective 3: Interpret statement of cash flows.

Anticipated Problem: What is the statement of cash flows?

III. Statement of cash flows interpretation

A. The ***statement of cash flows*** is the part of the financial statement that reports the inflow and outflow of cash for the accounting period of the income statement: operating activities, investing activities, financing activities, and certain supplemental information for the period. ***Cash flow statement*** is another name for a statement of cash flows. The statement of cash flows contrasts the income statement, which presents net income or net loss on the accrual basis of accounting. The ***accrual basis of accounting*** is a system that matches revenues and expenses based on when they occur, not when cash is exchanged. Therefore, the income statement does not display the actual cash generated and used, rather revenues and expenses. The statement of cash flows reports the inflows and outflows for the following categories:

1. Section 1 is a report of the cash flows from operating activities. ***Operating activities*** are business functions related to services (e.g., manufacturing or marketing). Items are converted on the income statement from the accrual basis of accounting to the cash basis of accounting. The ***cash basis of accounting*** is a process that reports revenue when cash is received and expenses when cash is disbursed.
2. Section 2 is a report of the cash flows from investing activities. ***Investing activities*** are cash flows from the sale and the purchase of property, plant and equipment, and long-term investments.
3. Section 3 is a report of the cash flows from financing activities. ***Financing activities*** are cash flows from activities related to the company's stock, bonds, and dividends.
4. Section 4 is a report of supplemental information. ***Supplemental information*** is information about material exchanges that do not involve any cash (e.g., trading assets).

B. The statement of cash flows is related to the other financial statements in the following ways:

1. Net income from the income statement is used to reconcile cash from operation activities. Cash from operating activities can be compared to net income to determine if the profits from the business are generating increased cash.
2. Any balance sheet items that have a cash impact are linked to the cash flow statement as a source or use of cash. For example, when property is purchased or a loan is procured, those items are reported as a cash inflow or outflow.
3. The overall change in the balance in cash from one balance sheet to another will be the net change in cash reported on the statement of cash flows.

Teaching Strategy: *Many techniques can be used to help students master this objective. Use VM–D.*

Objective 4: Interpret statement of owner's equity.

Anticipated Problem: How can a person interpret the statement of owner's equity?

IV. Statement of owner's equity

A. The ***statement of owner's equity*** is the part of the financial statement that reconciles changes in the retained earnings account for a corporation. Owner's equity changes are reported as follows:

	Beginning Owner's Equity
+	Owner Contributions
+	Net Income or – Net Loss
–	Owner Withdrawals (drawing or dividends)
	Ending Owner's Equity

B. ***Owner contributions*** are types of capital investment (e.g., money or assets).

1. For a corporation, owner contributions are from purchases of capital stock, and this statement of owner's equity is called the ***statement of retained earnings***.
2. For a sole proprietorship and for a partnership, owner withdrawals are referred to as ***drawing***. For a corporation, ***dividends*** are owner withdrawals.

C. The statement of owner's equity is related to the other financial statement reports in the following ways:

1. Ending owner's equity calculated on the statement of owner's equity is reported in the owner's equity section of the balance sheet.
2. Net income reported on the income statement is used in the calculation to reconcile owner's equity on the statement of owner's equity.
3. Owner's withdrawals are reported in the financing section of the statement of cash flows.
4. Owner's contributions and withdrawals also impact the related asset accounts on the balance sheet by increasing or decreasing the account balance.

Teaching Strategy: *Many techniques can be used to help students master this objective. Use VM–E. Assign LS–A.*

Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. If a textbook is being used, questions at the ends of chapters may be included in the Review/Summary.

Application. Use the included visual master(s) and lab sheet(s) to apply the information presented in the lesson.

Evaluation. Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

Answers to Sample Test:

Part One: Matching

1. d
2. e
3. f
4. a
5. b
6. c

Part Two: Completion

1. dividends
2. statement of cash flows
3. income statement
4. balance sheet
5. owner's equity
6. drawing

Part Three: Short Answer

The four main financial statement reports are balance sheet, income statement, statement of owner's equity, and statement of cash flows. Answers about their interrelation will vary.

Sample Test

Name ______________________________

Financial Statement Line Item Relationships

Part One: Matching

Instructions: **Match the term with the correct definition.**

a. asset
b. accounting period
c. accrual basis of accounting
d. cash basis of accounting
e. liability
f. net income

_____1. A process that reports revenue when cash is received and expenses when cash is disbursed

_____2. Financial debt or obligations that occur as part of doing business

_____3. The difference between total revenue and total expenses when total revenue is greater

_____4. A resource that has economic value and an expectation of providing future benefits

_____5. The timeframe for which the company is reporting the results of its operations

_____6. A system that matches revenues and expenses based on when they occur, not when cash is exchanged

Part Two: Completion

Instructions: **Provide the word or words to complete the following statements.**

1. For a corporation, owner withdrawals are referred to as ________________________.
2. The financial statement report that shows the inflow and outflow of cash for the accounting period is the ________________________.

3. The financial statement report that shows a company’s financial performance over a specific period of time is the ________________________.

4. The financial statement that reports the assets, liabilities, and owner’s equity at a specific point in time is the ________________________.

5. The section of the balance sheet that represents the capital available to owners is ________________________.

6. For a sole proprietorship and for a partnership, owner withdrawals are referred to as ________________________.

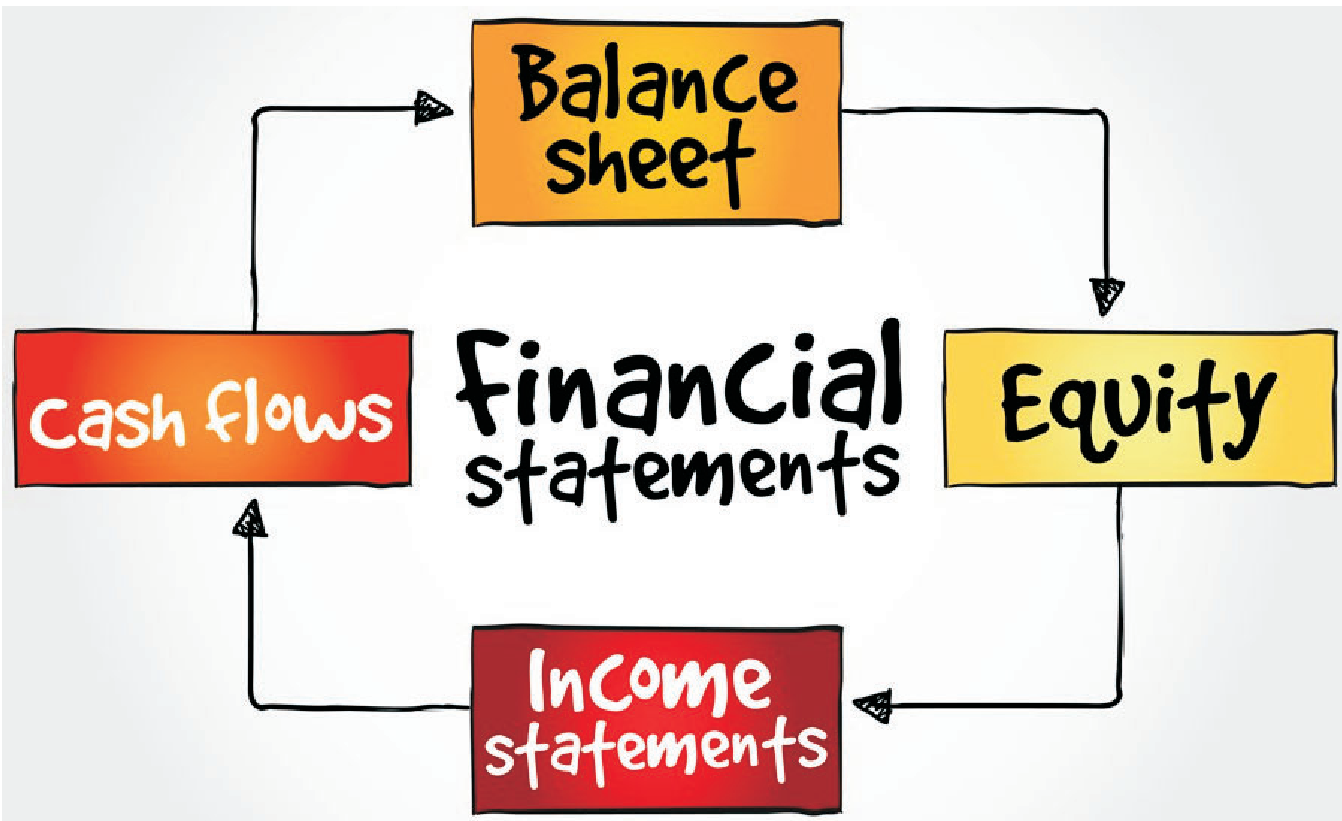
Part Three: Short Answer

Instructions: **Answer the following.**

List the four main financial statement reports, and describe how they are related to one another.

FINANCIAL STATEMENT COMPONENTS

A financial statement is a series of reports that summarize the business's financial results, condition, and cash flows.



BALANCE SHEET

COMPANY NAME HERE			
Balance Sheet			
For the Period Ended ________			
Assets	**Amount**	**Liabilities**	**Amount**
Current Assets		Current Liabiliites	
Cash		**Account Payable**	
________		________	
________		________	
________		________	
Fixed Assets		**Long Term Liablities**	
________		________	
________		________	
________		________	
Intangible Assets		**Share holders equity**	
________		________	
________		________	
________		________	
Other Assets		**Secured Loans's**	
________		________	
________		________	
TOTAL ASSETS		**TOTAL LIABILITIES**	

A balance sheet is a financial statement that reports the assets, liabilities, and owner’s equity at a specific point in time. The balance sheet has three main sections: assets, liabilities, and owner’s equity.

A balance sheet illustrates the Accounting Equation:

Assets = Liabilities + Owner’s Equity

VM–C

INCOME STATEMENT

The income statement is the part of the financial statement that reports a company's financial performance over a specific period of time. The income statement is referred to as the profit and loss statement or P&L.

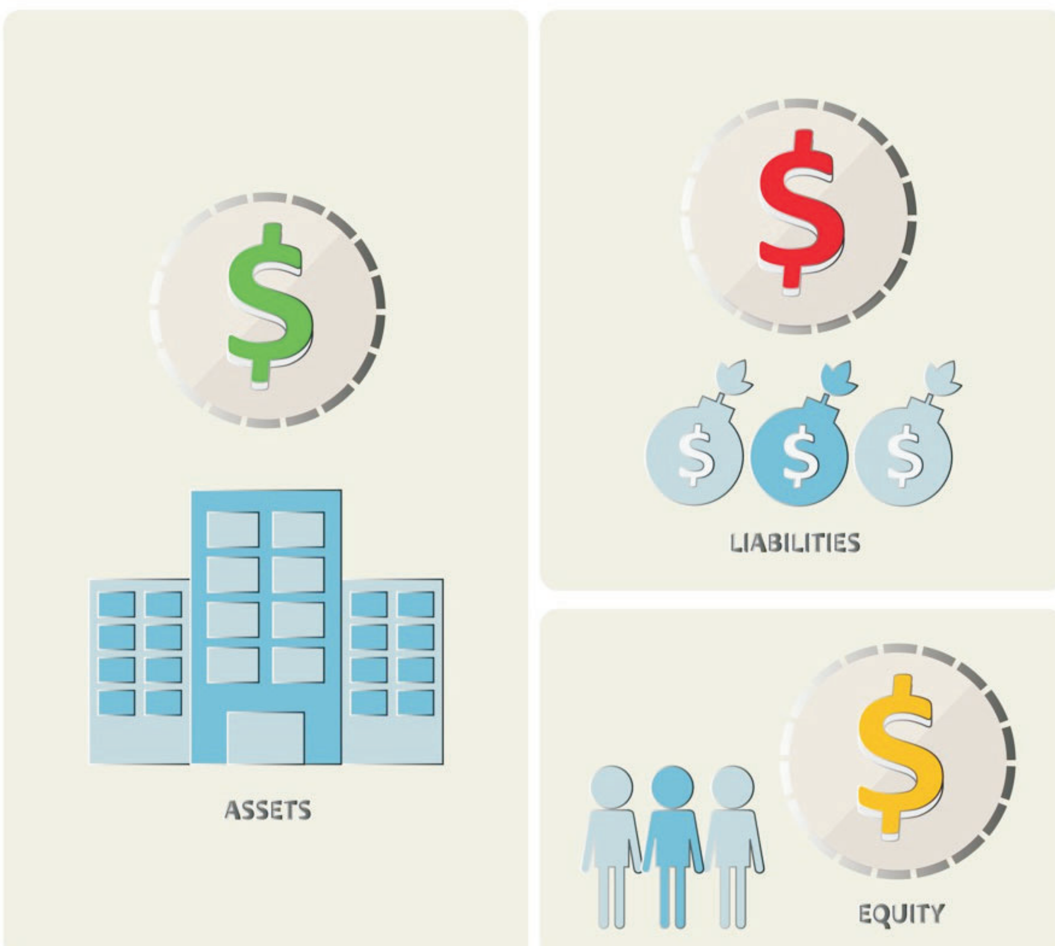
Revenues – Expenses = Net Income (Net Loss)

STATEMENT OF CASH FLOWS

The statement of cash flows reports the inflow and outflow of cash for the accounting period of the income statement: operating activities, investing activities, financing activities, and certain supplemental information for the period.

STATEMENT OF OWNER'S EQUITY

Beginning Owner's Equity
\+ Owner Contributions
\+ Net Income or – Net Loss
– <u>Owner Withdrawals (drawing or dividends)</u>
Ending Owner's Equity



LS–A

Name ______________________________

Financial Statement Relationships

Purpose

The purpose of this activity is to demonstrate the relationships between the financial statement reports.

Objectives

1. Research the relationships between the financial statement reports.
2. Make inquiries about how specific transactions have a ripple effect on the financial statements.
3. Construct a flow chart to demonstrate the impact of a specific transaction on the financial statements.
4. Participate in a discussion regarding your findings and your flow chart.

Materials

- lab sheet
- class notes
- paper
- writing utensil
- markers
- device with Internet access
- graphic design software
- poster paper

Procedure

1. Work independently or with a partner.

2. Review the following video “How Financial Statements Fit Together” at https://www.youtube.com/watch?v=Mcj5ES2HDqY.

3. Use your class notes to conduct additional research using an Internet search engine to explore the following questions (or you may create your own questions with instructor permission). Make notes on your paper.

   a. How are financial statements impacted when the balance of ending inventory is overstated or understated?
   b. If the ending balance in supplies is overstated or understated, how does that impact the financial statements?
   c. If a company does not recognize its unearned revenue, how does that impact the financial statements?

4. After researching the three questions, choose one question. Construct a flow chart to demonstrate the impact of that transaction on the financial statements. You may use a flow chart template found in word-processing software, or construct the flow chart using poster paper. Attach the flow chart to this lab sheet, and/or send a link to your instructor.

5. Share your findings, and present your flow chart to the class.

6. Turn in your completed lab sheet and flow chart to your instructor.