

## Introduction

*Principles of Accounting: A Storytelling Approach* offers an introduction to accounting using engaging instructional strategies, so learners gain a deeper understanding of accounting fundamentals.

"The premise is that students are better able to understand the accounting process and information system if they understand the nature and functions of business before teaching them the mechanics of the bookkeeping process."

Source: <u>Ainsworth & Deines, 2019: Introduction to Accounting: An Integrated Approach</u>

This introductory accounting course prepares learners for the *Association of International Certified Professional Accountants* (AICPA) advanced program - <u>Accounting Program for Building the Profession (APBP)</u>, endorsed by NAF for the program of study in the Academy of Finance.

## **Features**

Principles of Accounting content integrates the following authentic learning strategies:

- Data Storytelling
- Color Accounting
- Competency-Based Learning
- Self-Reflection

- Self-Assessment
- Flipped Learning
- Independent Learning
- Authentic Project-Based Learning

#### Educator Resources include:

- Essentials Learning philosophy and course overview
- Scope & Sequence with learning outcomes
- Lesson Plans with detailed presentation instructions in the <u>PowerPoint Note Pages</u>
- For Learner Resources include:
  - o Self-guided projects to enhance *learner agency*
  - o *Flipped learning* to increase independent learning
- Stretch Resources include:
  - Professional learning articles and on-demand videos to augment educator best practices

#### **Lesson Plans**

Lesson plans provide details for implementing *authentic learning strategies* and instructional materials to:

- Promote ongoing *self-reflection* to boost learning.
- Implement *self-assessment* as formative assessments to measure knowledge transfer and competency levels.
- Facilitate and promote <u>independent learning</u>.
- Offer *authentic project learning experiences* as summative assessments.
- Contain detailed instructions for lesson delivery with recommended learning strategies.
- Include learning outcomes with higher-order action verbs to increase academic rigor and depth of learning.







## **Data Storytelling**

Principles of Accounting offers a teaching and learning paradigm shift to **Data Storytelling** by integrating effective, relatable stories to explain the information in the numbers so that learners understand and remember what those numbers mean.

#### Learning Strategy

Take the **NUMB** out of **numb**ers by combining numbers with stories. After taking *numb* out of numbers, all that remains is **ERS: E**ffective, **R**elatable **S**tories.

Source: accountingTODAY: Why do accountants need to be Data Storytellers?

#### **Now Reality**

*Effective,* **R***elatable* **S***tories* (*ERS*) change accounting from a baffling set of numbers to applicable stories about numbers relevant to learners' lives.

## **Data Storytelling**

The art of data storytelling in accounting has four elements as follows:

Elements of Data Storytelling				
Element	Story Type	Accounting Process	Label	
1	Storytelling	Reporting	R	
2	Story Using	Analyzing	Α	
3	Story Building	Mechanizing/Bookkeeping	М	
4	Story Building Automation	<b>S</b> preadsheeting	S	
	Story: Personal	Identifying Careers	C	

#### **Units of Study**

Principles of Accounting contains four units of study that integrates data storytelling throughout the course as follows:

Principles of Accounting: Units of Study			
Unit Number	Storytelling	General Accounting Concepts	
1	Accounting Today	Financial Storytelling	
2	Story of Now	Balance Sheet	
3	Story of How	Income Statement	
4	Story of Building	Transactional Recording/Journalizing	







## Scope and Sequence

Principles of Accounting focuses on learners' capacity to demonstrate their understanding of accounting through analytical and creative thinking and problem-solving to make critical decisions about a business's financial health. There is a significant shift from the traditional mechanics involved in bookkeeping to developing accounting competencies and skill sets while establishing a general understanding of bookkeeping.

The Principles of Accounting units feature competency-based learning experiences to develop the following:

- Association of International Certified Professional Accountants, <u>AICPA Accounting Competencies</u>
  - Accounting competencies are the *technical competencies* of the profession that add value to the business and contribute to a prosperous society.
- National Business Education Association, Business Education Standards
  - Business standards are areas of competency that are crucial to the success of any learner as an employer, employee, and citizen.
  - Learners who achieve the *NBEA's Standards for Accounting* will be able to:
    - Read, interpret, and understand financial information
    - Apply accounting principles
    - Understand how accounting systems provide information
    - Recognize different uses of accounting
    - Appreciate the dynamic nature of business environments

## **UNIT 1: Accounting Today**

#### **Essential Questions (EQ):**

- 1.1 Why are stories necessary in business?
- 1.2 What are financial stories in business?
- 1.3 How do business and accounting perspectives differ in financial storytelling?
- 1.4 Why is spreadsheeting proficiency a critical accounting competency?

1.5 Why become a CPA?

1.6 What is an authentic project-learning experience?

## UNIT 2: The Story of Now (Balance Sheet)

**Essential Questions & Accounting Concepts:** 

- 2.1 What does the Now look like in a financial story?
  - a. Structure of the Balance Sheet







# PRINCIPLES OF ACCOUNTING: A Storytelling Approach Educator Resource: Scope & Sequence with Learning Outcomes

- 2.2 What are the relationships between the three (3) categories of a Balance Sheet?
  - a. Assets as Valuable Things
  - b. Liabilities and Equity as Obligations
- 2.3 How do internal and external perspectives differ within the Balance Sheet?
  - a. Business Entity Concept
  - b. Creditor's and Owner's Perspectives
  - c. Contributed Equity
- 2.4 How is Profit shown on the Balance Sheet?
  - a. Generated Equity

## UNIT 3: The Story of How (Income Statement)

#### **Essential Questions & Accounting Concepts:**

- 3.1 Why is the Income Statement necessary?
  - a. Representation of the Profit
  - b. Generated Equity on the Income Statement
- 3.2 What does the *How* look like in a financial story?
  - a. Structure of the Income Statement
- 3.3 What are the relationships between the two (2) parts of the Income Statement?
  - a. Revenue as Value Generating Activities
  - b. Expenses as Value Sacrificing Activities
- 3.4 How do internal and external perspectives differ within the Income Statement
  - a. Business Entity
  - b. Perspective of Sellers and Buyers

## **UNIT 4: Story Building**

#### **Essential Questions & Accounting Concepts:**

- 4.1 Why is Transactional Recording (Journalizing) necessary?
  - a. Detailed *Documentation*
- 4.2 What is the process of Transactional Recording?
  - a. Documentation of Financial Transactions







4.3 What information requires recording at the end of an accounting period?

- a. Updating Recordings (*Adjusting Entries*)
- b. Closing Recordings (Closing Entries)
- 4.4 How do you analyze the recordings to tell the stories?
  - a. Account Balances and Trial Balance
  - b. Trial Balance and Financial Statement

## **Data Storytelling Elements: Learning Outcomes**

## **Data Storytelling Elements**

The crosswalks for the Data Storytelling Elements 1-4 provide the unit number for each Learning Outcome. Use the crosswalk to:

- Review the Learning Outcomes for the Data Storytelling Elements.
- Identify the Unit of Study for the designated Learning Outcome.
- Identify the aligned Essential Question/s.

Element 1 – REPORTING: Storytelling		
Reporting: Storytelling	Unit #/EQ	Learning Outcomes - Learners:
R1	1.1	Explain how the structure and organization play a role in their everyday lives
R2	1.1	Justify the need for financial storytelling in business
R3	1.2	Interpret the basic financial storytelling structure that exists in business and accounting
R4	1.3	Differentiate between internal and external perspectives in business and accounting
R5	2.1	Evaluate the value of a company's assets
R6	2.1	Analyze a company's <i>liabilities</i>
R7	2.1	Assess a company's <i>equity</i>
R8	2.3/3.1	Clarify the difference between contributed equity and generated equity
R9	2.4/3.1	Describe the representation of <i>profit</i> within <i>equity</i> Explain the relationship of <i>profit</i> with the Income Statement
R10	3.2	Analyze a company's <i>expenses</i>
R11	3.2	Predict a company's <i>revenues</i>

## **Element 1: Reporting**





# Element 2: Analyzing

Element 2 – ANALYZING: Story Using		
Analyzing: Story Using	Unit #/EQ	Learning Outcomes - Learners:
A1	2.2	Evaluate how a company uses assets
A2	2.2	Imagine how assets are acquired and sourced by companies
A3	2.2	Apply the Accounting Equation to deduce the value relationship(s) between assets, liabilities, and equity
A4	2.2	Apply ratios to calculate and interpret value relativity within the balance sheet
A5	2.2	Identify the accounts impacted by balance sheet financial activities (Transactions)
A6	2.1	Justify how and why various uses of asses incur expenses
A7	2.1	Infer how various uses of assets generate revenues
A8	3.3	Speculate on the value relationship between expenses and revenues (Loss/Profit)
A9	3.1/3.4	Describe the representation of profit as generated equity on the Balance Sheet
A10	3.3	Calculate and interpret value relativity within the income statement (Ratios)
A11	3.3	Identify the accounts impacted by an income statement
A12	3.3	Identify accounts for updating (Adjusting Entries) at the end of an accounting period
A13	3.1/3.3	Transfer the value of profit (Net Income/Loss) for the accounting period to earned equity (Closing Entries)

# **Element 3: Mechanizing**

	Element 3 – MECHANIZING (Bookkeeping): Story Building		
Mechanizing: Story Building	Unit #/EQ	Learning Outcomes - Learners:	
M1	2.0/4.1/4.2	Record value increases and decreases to accounts impacted by a <i>balance sheet</i> financial activity (Transaction)	
M2	3.0/4.1/4.2	Record value increases and decreases to accounts impacted by an <i>income statement</i> financial activity (Transaction)	
M3	4.2	Record value debits and credits to accounts impacted by a financial activity (Transaction)	
M4	4.2	Calculate and record the value balance of accounts	
M5	4.3/4.4	Create a trial balance at the end of an accounting period	
M6	4.3/4.4	Prepare <i>Financial Stories</i> (Statements) using <i>account balances</i> at the end of an <i>accounting period</i>	
M7	2.0/4.3	Record the payment (withdrawals/dividends) of the <i>value of obligations</i> to the owner(s) during the accounting period	







## **Element 4: Spreadsheeting**

# Learning Outcomes:

Spreadsheet proficiency is a critical competency to ensure success in high school and college accounting courses.

*Indeed* recommends that accounting professionals have a comprehensive knowledge of *"spreadsheet programs to collect, organize, and analyze large amounts of data related to their business."* Accountants must manage data efficiently and use spreadsheet programs to perform mathematical calculations quickly and accurately.

Source: 10 Essential Accountant Competencies that Employers Seek
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Element 4 – SPREADSHEETING: Story Building Automation		
Automation Story Building	Unit #	Learning Outcomes Learners use spreadsheets to demonstrate:
S1	1	Basic visual formatting of cells and text (Level 1)
S2	2	Moderate visual formatting of cells and text (Level 2)
S3	3	Basic <i>functional</i> operations with cells, text, and numbers (Level 1)
S4	4	Moderate <i>functional</i> operations with cells, text, and numbers (Level 2)

Spreadsheet Skills		
Skill Levels	Learning Outcomes	
	Visual Spreadsheet Skills	
	Identify a cell reference	
	Enter, edit, or delete data into a cell	
Level 1	Cut, copy, and paste a collection of cells	
Basic: Formatting	Select a cell or a sequence of cells	
Cells & Text	Modify column width and row height	
	Format data: font, size, color, and style	
	Align data within a cell	
	Merge and center data	
	Fill a cell with color	
Level 2	Apply borderlines	
Moderate: Formatting	Copy visual formatting from one cell to another	
Cells & Text	Insert and delete columns or rows	
	View a worksheet using the sheet tabs	
	Hide or unhide columns	







Spreadsheet Skills		
Skill Levels	Learning Outcomes	
F	unctional Spreadsheet Skills	
	Apply number formats to data	
Level 1	Alter the number of decimal places	
Basic:	Calculate data using formulas	
Functional Operations	Calculate the total number using AutoSum	
With Cells,	Fill cells with a series using AutoFill	
Text & Numbers	Insert or delete worksheets	
	Copy a worksheet	
Level 2	Use cells from other worksheets in formulas	
Moderate:	Troubleshoot an error message	
Functional Operations	Use absolute cell references	
With Cells,	Format a cell using conditional formatting	
Text & Numbers	Produce a pivot table and chart	

## Identifying Careers

Principles of Accounting integrates career readiness and work-based learning throughout the four units of study by implementing a Virtual Shadowing Project (VSP). Learners personalize their accounting journey by exploring careers in accounting.

Identifying Careers: A Virtual Shadowing Project (VSP)		
Personal Story	Unit #	Learning Outcomes - Learners:
C1	1-4	Explore the multitude of pathways accountants can pursue
C2	1-4	Investigate how an accounting career can fit into any industry or company
Complete the Virtual Shadowing Project (VPS) throughout the course.		

## **AICPA & Careers**

The certified public accountant (CPA) profession offers unlimited career growth and development possibilities. AICPA promotes various tools to help high school learners investigate the profession and take them to the next level.

<u>Start Here. Go Places</u>: AICPA's interactive website gives learners a chance to discover what a career in accounting means and helps them see the infinite possibilities in the profession.



