



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

BUSINESS & COMPUTER SCIENCE

PATHWAY: Financial Management - Accounting

COURSE: Principles of Accounting II

UNIT 7: Financial Analysis



INTRODUCTION

Annotation:

In this unit, students will apply common analysis tools to examine the financial strength of a company. Students will discover how the financial statements (balance sheet, income statement, statement of stockholder's equity, and cash flow statement) are inter-related, and how to make proper comparisons between companies.

Grade(s):

	9 th
X	10 th
X	11 th
X	12 th

Time: 8 Hours

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Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

BCS-PAII-6. Students will create, interpret, and analyze end-of-fiscal-period activities and financial statements.

- b. Evaluate financial statements using horizontal analysis, vertical analysis, and commonly used financial ratios.
- d. Use software to evaluate the effect of changes in operating procedures, accounting methods, and estimates on the financial statements and ratios.
- e. Use software to generate charts and graphs to analyze the financial condition of the business.
- f. Discuss the importance of integrity, confidentiality, and high ethical standards in the preparation of financial statements.

GPS Academic Standards:

ELA11RC3. The student acquires new vocabulary in each content area and uses it correctly.

ELA11C1. The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

ELA11SLV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions.

MM3P1. Students will solve problems (using appropriate technology).

MM3P4. Students will make connections among mathematical ideas and to other disciplines.

National / Local Standards / Industry / ISTE:

Accounting III: Prepare, interpret, and analyze financial statements using manual and computerized systems for service, merchandising, and manufacturing businesses.



UNDERSTANDINGS & GOALS

Enduring Understandings:

- Data on its own is useless.
- Data must be compared and analyzed.
- Care must be taken to ensure comparisons of like entities (e.g. comparing multiple years within the same company or between companies of the same industry, size, etc.)
- Understanding what the ratio means is more critical than knowing how to calculate the ratio.
- Each ratio is interrelated to other ratios as well as to the vertical and horizontal analysis.
- Integrity, confidentiality, and high ethical standards are crucial to maintaining the viability of the accounting profession.

Essential Questions:

- How do liquidity ratios measure the financial health of a company?
- How do profitability ratios measure the financial health of a company?
- What ratios help to measure the financial strength of a company?
- Why are integrity, confidentiality, and high ethical standards important in accounting?

Knowledge from this Unit:

- Students will know how to calculate liquidity ratios: current ratio, quick ratio, working capital, merchandise inventory turnover, and accounts receivable turnover.
- Students will know how to calculate profitability ratios: return on common stockholder's equity, earnings per share of common stock, and price-earnings ratio.
- Students will know how to calculate financial strength ratios: ratio of stockholders' equity to liabilities, ratio of property, plant, and equipment to long-term liabilities, and equity per share.
- Students will understand the impact of unethical accounting practices on companies, employees, investors, and the economy.

Skills from this Unit:

- Students will analyze liquidity ratios and discuss the company's liquidity position using information from vertical and horizontal analysis to explain and support their findings.
- Students will analyze profitability ratios and discuss the company's liquidity position using information from vertical and horizontal analysis to explain and support their findings.
- Students will analyze financial strength ratios and discuss the company's liquidity position using information from vertical and horizontal analysis to explain and support their findings.
- Students will be able to discuss historical instances of unethical practices in accounting and their impact.



ASSESSMENT(S)

Assessment Method Type:

- ☐ Pre-test
- ☐ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☐ Unit test
- ☒ Group project
- ☒ Individual project
- ☒ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☐ Self-check rubrics
 - ☐ Self-check during writing/planning process
 - ☒ Journal reflections on concepts, personal experiences and impact on one's life
 - ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
 - ☐ Academic prompts
 - ☐ Practice quizzes/tests
- ☐ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☐ Observe students role playing
- ☐ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☐ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☒ Partner and small group discussions
 - ☒ Whole group discussions
 - ☐ Interaction with/feedback from community members/speakers and business partners
- ☒ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☒ Application of skills to real-life situations/scenarios
- ☐ Post-test

Assessment(s) Title:

Financial Analysis

Assessment(s) Description/Directions:

As provided by text.

Attachments for Assessment(s):



LEARNING EXPERIENCES

Sequence of Instruction

Lesson 1 - How do liquidity ratios measure the financial health of a company?

- **Define the Vocabulary:**
 - **Account Receivable Turnover** – the number of times per year a company collects its accounts receivable
 - **Common-size statements** – financial statements on which all items are reported as percentages of a key item on the statement
 - **Comparability** – an accounting characteristic that refers to financial information that can be compared from one fiscal year to another or from one business to another.
 - **Current Ratio** – current assets divided by current liabilities
 - **Horizontal Analysis** – the comparison of dollar amount changes and percentage changes for the same items on a company's financial statements for two or more periods.
 - **Merchandise Inventory Turnover** – the number of times a company's inventory is sold during the course of a year
 - **Quick Ratio** – short-termed liquid assets divided by current liabilities
 - **Ratio Analysis** – the comparison of two amounts on a financial statement.
 - **Short-termed liquid assets** – assets that can be converted quickly to cash (e.g. cash, net receivables, and marketable securities)
 - **Working Capital** – current assets minus current liabilities – determines the amount of current assets left to continue operations

Introduce Liquidity Ratios: Utilizing the accounting textbook (South-Western, Glencoe, etc.), teacher will introduce the basic accounting equation. Through teacher guidance students will complete various problems together for understanding. Students will then work independently to gain knowledge of basic concepts by completing application problems at the end of the chapter.

Supplemental Activities: Financial Analysis: This can be done as an individual or a team project. If the teacher needs to differentiate the lesson, it should be used as a team project with the teams formed by the teacher for balance in knowledge, ability, etc. The teacher should go to the Securities and Exchange Commission website http://www.sec.gov/idea/searchidea/companysearch_idea.html and search for a company (or several companies if a team project - one for each team). After finding the company, the teacher should click on the 10-K filing. In the index find the financial statements. Print the financial statements or cut and paste them into Word then print them. If the students have access to computers, they can key the information into Excel and set up equations to perform the calculations. If computer access is not available, use the table function in word to provide two columns for calculations before printing or provide students with columned paper to transfer the statements to for calculation purposes.

Have the students perform a horizontal and vertical analysis of both the income statement (aka Statement of Operations) and the balance sheet. First they should find the dollar amount of difference. (Hint: teach them to put in the earlier year first then subtract the more current year and decreases will show up as negatives). Next, have them calculate the percentage of difference (Dollar amount of

difference divided by the base year) for both the income statement and the balance sheet. Save the calculations for lesson.

Have the students calculate the five measures of liquidity (Working Capital, Current Ratio, Quick Ratio, Merchandise Inventory Turnover, and Accounts Receivable Turnover). Have students prepare to discuss what the measures mean and how they can use the horizontal and vertical analysis to explain and support their findings.

Extension Activity:

- Students can complete Challenge problems in their text.
- The Stock Market Game: This website has many lessons that can be used to help students understand why we need to do financial analysis.

Lesson 2 - How do profitability ratios measure the financial health of a company?

Define Vocabulary:

- o **Earnings Per Share of Common Stock** – measures the amount of profit that can be assigned to each share of common stock.
- o **Price Earnings Ratio** – the market price per share divided by the earnings per share
- o **Return on Stockholder's Equity** – measures how well a business has used the resources provided by the stockholders.

Introduce Profitability Ratios:

Utilizing the accounting textbook (South-Western, Glencoe, etc.), teacher will introduce the basic accounting equation. Through teacher guidance students will complete various problems together for understanding. Students will then work independently to gain knowledge of basic concepts by completing application problems at the end of the chapter

Supplemental Activities:

This is actually a continuation of the activity from Lesson 1. Provide the students with another copy of the company information gathered in Lesson 1, students should calculate the return on common stockholder's equity, earnings per share of common stock (if not already provided on the income statement), and the price earnings ratio (you will have to provide a market price per share or have the student look it up). Have the students discuss the meaning of these ratios and draw conclusions. Help them to use the vertical and horizontal analysis to support and explain their findings.

Extension Activities:

Students will do the Challenge problems in their text.

Lesson 3 - What ratios help to measure the financial strength of a company?

Define Vocabulary:

- o **Equity Per Share** – Indicates the amount of assets that would be distributed per share of stock were the company to be liquidated.
- o **Liquidate** – To sell off all assets of a company and distributed the receipts first to the creditors then to the stockholders, so that the company is no longer in business.

- **Ratio of Property, Plant, and Equipment to Long-Term Liabilities** – Indicates the company's ability to borrow more money on a long-term basis
- **Ratio of Stockholder's Equity to Liabilities** – total stockholder's equity divided by total liabilities; a high ratio indicates the ability to offset losses

Introduce Financial Strength Ratios:

Utilizing the accounting textbook (South-Western, Glencoe, etc.), teacher will introduce the basic accounting equation. Through teacher guidance students will complete various problems together for understanding. Students will then work independently to gain knowledge of basic concepts by completing application problems at the end of the chapter

Supplemental Activities: This is actually a continuation of the activity from Lesson 1. Provide the students with a copy of the company information gathered in Lesson 1, students should calculate the ratio of stockholder's equity to liabilities, ratio of property, plant, and equipment to long-term liabilities. Have the students discuss the meaning of these ratios and draw conclusions. Help them to use the vertical and horizontal analysis to support and explain their findings.

Extension Activities:

- Students will do the Challenge problems in their text
- Set up student teams and have them play the Stock Market Game. Sign up at www.gcee.org.

Lesson 4 - Why are integrity, confidentiality, and high ethical standards important in accounting?

- **Define Vocabulary:**
 - **Confidentiality** - having another's trust or confidence; entrusted with secrets or private affairs
 - **Ethics** - a system of moral principles
 - **Integrity** - adherence to moral and ethical principles; soundness of moral character; honesty

Introduce the concepts of integrity, confidentiality, and high ethical standards:

Discuss the meanings of integrity, confidentiality, and ethics with the class. Ask why accountants have created a code of professional ethics. Provide students with Articles II, III, and IV of the AICPA Professional Code of Conduct. Discuss why accountants need to be concerned with the public interest, due diligence, integrity, and objectivity. Ask students to consider the long-term consequences of accountants not following these rules.

Supplemental Activities: Have students research and write a report on cases where accountants failed to keep the public trust: Global Crossing, Enron, Adelphia, World Com, AIG, K-Mart (before Sears buy-out), Tyco International, Qwest Communications, Peregrine Systems, Merck, and Peregrine Systems. Students should explain what the accountants did wrong and how it was discovered. They should also describe how it impacted the company, its employees, investors, and the economy in general. They should also discuss what happened to the ones who did wrong and whether or not the company (or their accounting firm) is still in business. You may differentiate this activity by allowing students to prepare a PowerPoint and giving an oral presentation.

Distribute and discuss the handout “Steps in Ethical Decision Making” Show students the SIFE business ethics You Tube Video <http://www.youtube.com/watch?v=sDPsSyaZNIw>

This is an interactive video that allows classroom discussion for each scenario. Guide the students through the steps for each scenario.

Extension Activity:

- Stage a class debate on one or more of the ethical business dilemmas presented by the Institute for Global Ethics www.globalethics.org. One dilemma is provided with this lesson.
- Have students create a Code of ethics for their student teams. Use tips from this website: <http://www.ethics.org/resources/writing-effective-code.asp>

Attachments for Learning Experiences:

AICPA Code of Conduct
Smoothing the Factory’s – An Accounting Dilemma
Steps for Ethical Decision Making

Notes & Reflections:

You might find it necessary to review horizontal and vertical analysis. Use of student teams is strongly recommended in this unit as a means of differentiating the instruction. Teacher should form the teams so that they are as equal as possible in academic ability, technology ability, and social intelligence. It is also recommended that teacher assign jobs to each team member (i.e. facilitator, scribe, timekeeper). Some form of peer evaluation is also recommended.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Who needs a bailout?

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

In the recent rash of bailouts, the auto industry asked for its share. While Ford stated in hearings that it could survive without help, they determined that standing with their competition would improve the industry overall. So what was Ford doing that General Motors and Chrysler was not? Ask your students to use their new found skills in financial analysis to find the answer. They will only have Ford and General Motors for comparison because Chrysler is now an LLC (Limited Liability Corporation), no longer traded on the stock exchange and not required to file a 10-K. Encourage the students to review the 10-K filing (particularly the notes to the financial statements) on the SEC website http://www.sec.gov/idea/searchidea/companysearch_idea.html.

Students may present their findings:

1. In a written report
2. In a PowerPoint
3. On a poster
4. In an oral report

Attachments for Culminating Performance Task:

Ford Financial Statements
General Motors Financial Statements



UNIT RESOURCES

Web Resources:

<http://www.aicpa.org/about/code/index.html>
http://www.sec.gov/idea/searchidea/companysearch_idea.html
<http://www.business-ethics.com/>
www.globalethics.org
<http://www.ethics.org/resources/ethics-toolkit.asp>

Attachment(s):

Academic Integrity
Can I Borrow that?
Corporate Citizens Project with Rubric
Ethics
Ethics Guide
Junior Achievement Ethics Assignment
Junior Achievement Ethics Assignment II
Plagiarism activity
The Future of Corporate Ethics - pdf attached, also found at
<http://www.criticalcommunications.org/docs/TheFutureofCorporateEthics-U.S.pdf>
Word of the Month-Integrity – pdf attached, also found at
<http://cityofmissionviejo.org/Workarea/showcontent.aspx?id=2476>

Materials & Equipment:

Computer, Excel, Projector, Calculator

What 21st Century Technology was used in this unit:

☒	Slide Show Software	☒	Graphing Software	☐	Audio File(s)
☐	Interactive Whiteboard	☒	Calculator	☐	Graphic Organizer
☐	Student Response System	☐	Desktop Publishing	☐	Image File(s)
☐	Web Design Software	☐	Blog	☒	Video
☐	Animation Software	☐	Wiki	☒	Electronic Game or Puzzle Maker
☐	Email	☐	Website		
