



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

BUSINESS & COMPUTER SCIENCE

PATHWAY: Financial Management - Accounting

COURSE: Principles of Accounting I

UNIT 6: Interpreting Data



INTRODUCTION

Annotation: In this unit students will be introduced to basic financial statement analysis. They will learn to perform vertical and horizontal analysis as well as simple tests of liquidity.

Grade(s):

<input type="checkbox"/>	9 th
<input checked="" type="checkbox"/>	10 th
<input checked="" type="checkbox"/>	11 th
<input checked="" type="checkbox"/>	12 th

Time: Six Fifty Minute Sessions

Author: Dr. Marilyn Skinner

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-PAI-11. Students will use appropriate data to evaluate the performance of an organization.

- a. Interpret and evaluate financial statements to make sound business decisions.
- b. Interpret and evaluate industry trends and other relevant data to make sound business decisions.
- c. Read and interpret financial statements.
- d. Write summaries of financial statements.
- e. Present summaries for decision making.
- f. Use appropriate industry terminology.

GPS Academic Standards:

ELA10RC3. The student acquires new vocabulary in each content area and uses it correctly.

ELA10C1. 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.

ELA10SLV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions.

MM2P1. Students will solve problems (using appropriate technology).

MM2P4. Students will make connections among mathematical ideas and to other disciplines.

National / Local Standards / Industry / ISTE:

Accounting V: Use planning and control principles to evaluate the performance of an organization and apply differential analysis and present value concepts to make decisions.



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.

Essential Questions:

- What information can be gained from performing a horizontal analysis on an income statement and a balance sheet?
- What information can be gained from performing a vertical analysis on an income statement? A balance sheet?
- How are current ratio, quick ratio, and working capital related and what does each tell us about a company?

Knowledge from this Unit:

- Students will know the difference between horizontal and vertical analysis.
- Students will know that the base for vertical analysis of an income statement is net sales.
- Students will know that the base for vertical analysis of a balance sheet is total assets.
- Students will know how to identify current assets, quick assets, and current liabilities.

Skills from this Unit:

- Students will calculate the dollar difference and the percentage of difference for two years on the income statement and the balance sheet (Horizontal Analysis)
- Students will calculate and state each number in the income statement as a percentage of net sales and each number in the balance sheet as a percentage of Total Assets (Vertical Analysis)
- Students will calculate current ratio, quick ratio, and working capital.
- Students will present an analysis of a company's current ratio, quick ratio, and working capital, supporting their findings with information from the horizontal and vertical analysis.



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 of Corporate Financial Statements

Assessment(s) Description/Directions:

The teacher should choose financial statements from a company that students would recognize. These can be found at the Securities and Exchange Website http://www.sec.gov/idea/searchidea/companysearch_idea.html. Financial statements can be found in the current 10-K filing. Students will perform the analysis learned in this unit and present their findings in both a written and an oral report to the class. (If a team project, have the team members write individual reports, but present as a group.

Attachments for Assessment(s):

Copies of financials from SEC filings



LEARNING EXPERIENCES

Sequence of Instruction

BCS-PAI-11. Students will use appropriate data to evaluate the performance of an organization.

Lesson 1

- **Essential Question:** What information can be gained from performing a horizontal analysis of an income statement or a balance sheet?
- **Define Vocabulary.**
 - **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.
 - **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.
- **Introduce Horizontal Analysis:**

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 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 two.

- What Do Investors Look For?: Students will investigate their companies at Investopedia <http://www.investopedia.com/features/industryhandbook/> . They should answer the question: What do investors look for in this industry and how does my company measure up?

- **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

- **Essential Question:** What information can be gained from performing a vertical analysis on an income statement or a balance sheet?

- **Define Vocabulary.**

- **Base year** – the year used for comparison in financial statement analysis.
- **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
- **Vertical analysis** – the comparison of financial statements in which every dollar amount reported on a financial statement is also stated as a percentage of a base amount on the same statement

- **Introduce Vertical Analysis.**

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 perform a vertical analysis on the income statement (net sales is the divisor) and the balance sheet (total assets is the divisor). Students should do this for all years shown on the financials. Help students understand how comparing percentages can be more useful than comparing whole numbers. Help students look for relationships between the vertical and horizontal analysis.

- **Extension Activities.**

Students will do the Challenge problems in their text.

Lesson 3:

- **Essential Question:** How are current ratio, quick ratio, and working capital related and what does each tell us about a company?

- **Define Vocabulary.**

- **Current ratio** – the relationship between a company's current assets and its current liabilities; calculated by dividing the dollar amount of current assets by the dollar amount of current liabilities.
- **Working capital** – the amount by which current assets exceed current liabilities.
- **Quick ratio** – the relationship between a company's short-term liquid (i.e. quick) assets and its current liabilities; calculated by dividing the company's quick assets by its current liabilities.

- **Introduce current ratio, quick ratio, and working capital:**

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.**

Continuing to use the company information from the two previous lessons, have the students calculate the current ratio, quick ratio, and the working capital for all years on the balance sheet. Have the students discuss what each ratio tells about the company. Help the students find information in the horizontal and vertical analysis that explains or supports their findings. Have students construct visual comparisons (Charts, Bar Graphs) either in Excel or manually. Have student write a short report on their findings. Have students present their findings to the class.

- **Extension Activities.**

- Students will complete Challenge Problems in their text.
- Sign up student teams to play the Stock Market Game at www.gcee.org.

Attachments for Learning Experiences:

Reading Between the Bottom Lines - AICPA handout on Financial Analysis (Has excellent vocabulary section)

NIKE Financial Statements

Apple Financial Statements

Notes & Reflections: 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:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task:



UNIT RESOURCES

Web Resources:

Great You Tube Video: <http://www.youtube.com/watch?v=Vh-G3OGLBO4>

SEC Filings: http://www.sec.gov/idea/searchidea/companysearch_idea.html

AICPA Takin' Care of Business

<http://ceae.aicpa.org/Resources/Career+Awareness/Takin+Care+of+Business+Education+Handbook.htm>

Start Here: Go Places <http://www.startheregoplaces.com/>

The Motley Fool (Investment How To): www.fool.com

Financial Analysis PowerPoint odabasi.boun.edu.tr/ad311/003-Ratio%20ans%20State.Analysis-w.ppt

Attachment(s):

Materials & Equipment:

Computer, Excel Software, Text, Column Paper, Calculators

What 21st Century Technology was used in this unit:

<input checked="" type="checkbox"/>	Slide Show Software
<input type="checkbox"/>	Interactive Whiteboard
<input type="checkbox"/>	Student Response System
<input type="checkbox"/>	Web Design Software
<input type="checkbox"/>	Animation Software
<input type="checkbox"/>	Email

<input checked="" type="checkbox"/>	Graphing Software
<input checked="" type="checkbox"/>	Calculator
<input type="checkbox"/>	Desktop Publishing
<input type="checkbox"/>	Blog
<input type="checkbox"/>	Wiki
<input checked="" type="checkbox"/>	Website

<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Image File(s)
<input checked="" type="checkbox"/>	Video
<input checked="" type="checkbox"/>	Electronic Game or Puzzle Maker