



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

BUSINESS & COMPUTER SCIENCE

PATHWAY: Financial Management - Accounting

COURSE: Principles of Accounting II

UNIT 10: Management Accounting



INTRODUCTION

Annotation:

This unit will look at the purpose and scope of management accounting, manufacturing accounting, job order accounting, process cost accounting, and cost of goods manufactured.

Grade(s):

	9 th
X	10 th
X	11 th
X	12 th

Time: Six 50 minute periods.

Author: Dr. Marilyn K. 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-PAII-10. Students will apply appropriate accounting principles to managerial accounting systems.

- a. Explain the role of managerial accounting in the management process.
- b. Interpret and explain those costs and accounts that are unique to the manufacturing process.
- c. Discuss the cost flow concepts followed by a manufacturing business.
- d. Apply job order costing procedures to compute the cost of manufactured products.
- e. Prepare a schedule of cost of goods manufactured and explain its relationship to the income statement.
- f. Describe the types of products and apply appropriate accounting concepts and procedures for job order and process costing systems.

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 IV: Apply appropriate accounting principles to payroll, income taxation, managerial systems, and various forms of ownership.



UNDERSTANDINGS & GOALS

Enduring Understandings:

- Financial Accounting is for both external and internal users, management accounting is for internal users only
- Accounting for a manufacturing business requires keeping track of three inventories.
- While there are differences in tracking job order costs and process costs the main components are the same: Materials, Labor and Factory Overhead.

Essential Questions:

- How is accounting for a manufacturing business different from accounting for a service or retail business?
- What is the difference between a job order costing system and a process costing system?

Knowledge from this Unit:

- Manufacturing businesses have three inventories: raw materials, work-in-process, and finished goods.
- Each inventory represents an area of the plant: raw materials – the storeroom, work-in-process – the factory floor, finished goods – the showroom.
- Job order costing and process costing are methods of moving costs from work-in-process to finished goods.
- Both costing systems have the same three components: Direct Materials, Direct Labor and Factory Overhead.

Skills from this Unit:

- Prepare a Schedule of Cost of Goods Manufactured
- Compute Costs using Job Order Costing
- Compute Costs using Process Costing



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: Craft Cost Project

Assessment(s) Description/Directions:

This project requires a little preparation on the teacher's part and possibly a little expense, but it is worth it to help students understand the job order and the process costing systems.

1. Have the students complete the attached worksheet first.
2. You will then need to go online and find a simple craft that could be done on a short assembly line. The elements of the project should be things that are easily attainable and cheap (i.e. macaroni bracelets).
3. Prepare directions for assembling the craft. (i.e. cut a string to a length of 8 inches, count out 7 pieces of macaroni, string the macaroni, and tie the knot.)
4. Assign a per-unit cost for each element: direct materials, direct labor. Also assign a cost for the desk or table space they use (Factory overhead).
5. Form the students into teams.

6. First let each student in a team work on making bracelets by themselves (job order) after a specified length of time (Say 10 minutes) have them stop and calculate how many “jobs” they finished and their cost and also the cost of their work in process.
7. Next have each team set up an assembly line. Allow them the same amount of time to work on the bracelets as before.
8. Stop the teams and have them calculate how many items were completed and the cost, then have them calculate the cost of the work in process.

Attachments for Assessment(s):

Craft Cost Project



LEARNING EXPERIENCES

Sequence of Instruction

BCS-PAII-10. Students will apply appropriate accounting principles to managerial accounting systems.

- Explain the role of managerial accounting in the management process.
- Interpret and explain those costs and accounts that are unique to the manufacturing process.
- Discuss the cost flow concepts followed by a manufacturing business.
- Apply job order costing procedures to compute the cost of manufactured products.
- Prepare a schedule of cost of goods manufactured and explain its relationship to the income statement.
- Describe the types of products and apply appropriate accounting concepts and procedures for job order and process costing systems.

Lesson 1 - How is accounting for a manufacturing business different from accounting for a service or retail business.

- Define Vocabulary
 - Direct labor** – wages paid to employees who convert the raw materials into the finished product.
 - Direct materials** – raw materials used to make a product
 - Factory overhead** – manufacturing costs that cannot be classified as direct materials of direct labor (i.e. rent on the building).
 - Factory supplies** – materials used to keep the factory running but that do not go directly into
 - Finished goods** – products that have been completed and are ready for sale.
 - Indirect labor** – wages paid to supervisors and office workers who are not directly involved in the production of the product.
 - Manufacturing business** – buys raw materials and transforms them into finished products.
 - Work in process** – partially completed products in the factory.
- Introduce lesson – Review service and retail business differences with the students. Ask them to name manufacturing businesses that they know of. Ask them what makes these businesses different from a retail business. Introduce the concepts of the three inventories: raw materials, work-in-process, and finished goods. Have students recall the calculation of ending inventory in the multi-step income statement. Demonstrate that the calculations for the manufacturing inventories are similar. Discuss the components of Work-in-Process inventory: Direct Materials, Direct Labor, and Factory Overhead. Demonstrate the creation of the Schedule of Goods Manufactured.
- Assessment Activity – Using exercises from the text, have students work in pairs or small teams to create a Schedule of Goods Manufactured. Give each pair or team a different problem and have them model their thinking for the class.
- Extension Activity – Have students develop their vocabulary through the Manufacturing Business Word Search.

Lesson 2 - What is the difference between a job order costing system and a process costing system?

- Define Vocabulary
 - **Cost accounting system** – maintains records of manufacturing costs: direct materials, direct labor, and factory overhead.
 - **Job Cost Sheet** – Used to record the various manufacturing costs for each job.
 - **Job Order Cost Accounting** – manufacturing costs are accumulated for each product or batch of products produced.
 - **Materials requisition form** – used to request raw materials from inventory.
 - **Overapplied factory overhead** – when more factory overhead was applied than was actually used.
 - **Process Cost Accounting** – manufacturing costs are accumulated for each process or department
 - **Underapplied factory overhead** – when less factory overhead is applied than was actually used.
- Introduce the lesson – Explain to the students that cost accounting systems are used to accumulate the manufacturing costs: direct materials, direct labor, and factory overhead. Costs are accumulated in two ways: Job Order Costing and Process Costing. Using the text work through both processes.
- Assessment Activity – Use the Craft Cost project to give students a “hands-on” experience with job order and process costing.

Attachments for Learning Experiences:

Manufacturing Word Search
Craft Cost Project

Notes & Reflections:

For the craft project, Oriental Trading has craft kits at very reasonable prices. Another option would be to use sets of LEGOs or Tinkertoys to replicate the system. It could also be done with sandwich making.



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:

Cliff's Notes

<http://www.cliffsnotes.com/WileyCDA/CliffsReviewTopic/The-Cost-of-Goods-Manufactured-Schedule.topicArticleId-21248,articleId-21219.html>

Wikipedia has a nice explanation and an excellent example of job order costing

http://en.wikipedia.org/wiki/Job_costing

Good Explanation of computing equivalent units.

<http://www.sba.pdx.edu/faculty/michaels/360/11ch17/index.htm>

Entertaining Accounting Videos

www.studybeat.com

Attachment(s):

Comparison of Financial and Management Accounting
Craft Project for Standard Costs

Materials & Equipment:

Computer, calculator, materials for craft project (will vary depending on teacher preference)

What 21st Century Technology was used in this unit:

<input type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input checked="" type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input checked="" type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input checked="" type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input checked="" type="checkbox"/>	Website		