

FACTS Design – Studio Live Accounting

*6341 Student –Centered Learning
University of Texas - Brownsville
Butler – Summer 2010
Lynda Cannedy*



Introduction

Accounting texts for secondary students have changed little over the last decade. The major principles remain the same but the traditional “efficiency” teaching methodology and manual paper systems are dull and boring for students. By presenting students with a hypothetical, yet realistic, problem, this accounting lesson introduces accounting with a relevant, interesting approach.

Why teach accounting? Small businesses as well as large companies rely on accurate measurements of income and expenses as well as reliable numerical data showing what a business is worth at any particular point in time. Certain accounting principles are generally accepted and must be used if the information is to be valid and reliable.

This lesson is designed for junior and senior age high school accounting students. These students normally have strong foundational computer skills and a variety of mathematical skill levels. The time frame will be approximately twelve weeks.

Introductory Steps:

1. Students will view S. Truett Cathy’s news interview and look at an internet article to see the model of a successful business.
2. Students will join the Rider & Co. accounting firm and research possible forms of business organization.
3. Students will set up or construct an accounting system and complete an accounting cycle for their client, Studio Live, in order to prepare financial statements needed for a bank loan.
4. Students will use the financial information to present and justify the numbers to others including local CPAs.
5. Students will research bank borrowing procedures, the economics of interest rates, and loan scenarios. Students will then “apply for a loan” using a local banker for feedback.

Foundations

Literacy:

Accountants or business users of accounting information need to be literate in spreadsheet software, business communication including e-mail, memos, and accounting terminology, and have basic

mathematical or computational literacy. In this lesson, students are given opportunities to use higher level cognitive skills to comprehend the accounting concepts and apply them using several forms of discourse. A balance of decoding and encoding processes is used to further enhance literacy.

Problem-Solving:

How can students relate to accounting? Some of them have bank accounts with debit cards and some of them have part-time jobs where they see deductions taken out of their paychecks. In the business realm, most have no clue and they don't understand the importance of keeping accurate records.

I think many students could envision themselves starting their own business at some point, but they don't understand the legal and financial responsibilities involved. All high school students seem to be interested in listening to music. Perhaps a business started by a young college student that involved music like a small recording studio would be something they could relate to.

“Bella Martin has started her own business, called Studio Live, to allow her friends and others to record their own music and songs. She is renting a studio for \$500 a month and charging \$50 per hour to her customers. She wants to purchase some better recording equipment and has gone to the bank to get a loan but the bank says she needs to supply some financial statements. She has set up a bank account for her business but has not kept any official financial records. Being a college student with limited funds, she is asking for our help.”

That is when most small business owners realize they need help—when they go to a bank for a loan and the bank requires financial statements. By using this realistic scenario, maybe the interest of the students will be piqued.

Initial introduction to the problem will involve detailing the types of things Bella will need to know. Before the students can produce financial statements, they will need to understand accounting terminology, the accounting cycle, and the process of gathering information and preparing it for the statements. This problem is anchored in the larger field of accounting where accountants are frequently required to justify their numbers. Students will need to present their statements and be able to justify their findings. Students will extend their knowledge by researching similar businesses to analyze the appropriateness of the charges. An understanding of bank loan procedures should also come as an extension of information.

Knowledge:

Knowledge is designed by teaching structures and processes related to disciplinary knowledge. The structure of accounting includes the central theories or operations and forms the organizing principles for the study of accounting. The processes of accounting involve the “doing” activities.

Disciplinary Structures:

- understanding of accounting cycle for a service business
- terminology
- debits and credits

- T-accounts
- chart of accounts
- source documents
- forms of business organizations - proprietorship, partnership, corporation, non-profit
- understand role of financial institutions when borrowing money

Disciplinary Processes:

- calculator operation and skill
- touch keypad operation
- electronic spreadsheet skill
- using PMT function to calculate and evaluate loan scenarios
- using a variety of representations, tools, and technology to solve meaningful problems
- represent relationships among quantities using graphs, verbal descriptions and equations
- interpret and make decisions and judgments from functional relationships
- preparation of chart of accounts
- analyzing and recording transactions
- posting
- adjusting and closing entries
- preparation and analysis of financial statements
- presentation of financial information

Disciplinary Discourse:

The discourse is the mode of thought used to communicate accounting.

- graphic presentations of financial statements and information to a board
- justification of financial information to outside interests (banks, IRS, etc.)
- accompanying letters of explanation, communication with auditors, etc.

Narrative Discourse:

Students will view S. Truett Cathy's (owner of Chik-Fil-A) being interviewed by Neil Cavuto on Fox News in July, 2009 at

http://people.famouswhy.com/s_truett_cathy/#videos.



Students will look at the following article and discuss possible reasons for the success of Chik-Fil-A with a focus on the sales and financial information provided

<http://www.qsrweb.com/article/107700/Old-fashioned-principles-keep-Chick-fil-A-flying-high>

Using Information:

Process skills (process approach) for effective information use are best embedded in three general categories of activity - searching for information, sorting and judging information, and creating and communicating ideas and concepts as the result of information use (SSCC).

Students will be researching information on business organization, source documents, banking procedures, and the economics of interest rates. Students will be sorting source documents, judging financial information, creating formulas and calculations, comparing numbers between businesses, and communicating findings with each other.

Community:

Students will work in cooperative groups of 3-4 for research activities. Groups will be balanced for diversity, skill, and technological competence. The cooperative groups will also be allowed to collaborate with each other when questions arise. Rider & Co. will have weekly "board meetings" where progress and problems will be discussed and addressed and reflection encouraged.

Activities:

Authentic Activities:

- A1. Students will become the Rider & Co., accounting partnership with Studio Live (Bella Martin, owner) as their first client.
- A2. Students will have access to two CPAs and two local bankers to be able to e-mail and ask questions. The bankers will be sending loan applications and information to the students.
- A3. An actual "shoebox" will be used to bring artifacts (source documents) and questions from the client.
- A4. Students will prepare actual printed financial statements for Studio Live and will receive feedback from the CPAs and the bankers after sharing with the rest of the class.

Background-Building Activities:

- B1. Using the internet, students will research the difference between a proprietorship, a partnership, and a corporation. Students will be divided into three groups with each group taking one form of business organization. Students will also do a scavenger hunt to find model financial statements from a list of companies (local, national, and international).
- B2. Students will explore Excel spreadsheet software with special attention to insertion of data with proper column widths and row heights, using formatting for currency, and using functions for totals and subtotals, and using charts and graphs to represent spreadsheet data. The PMT function will also be introduced. Instructions will be provided with a handout.
- B3. Students will practice 10-key touch skills on the keyboard using practice sheet.
- B4. Using the textbook and Aplia software (online replacement for accounting workbooks that accompany the textbook), students will read about types of accounts (assets, liabilities, and capital) and the relationship between them using the accounting equation. They will complete the Aplia exercises.
- B5. Students will examine paper accounting forms (general journal, general ledger, and work sheet).

B6. Using the textbook and Aplia software, students will read about how to use T-accounts to analyze transactions and practice analyzing and recording transactions on Aplia.

B7. Using the textbook and Aplia software, students will read about and practice how to make a work sheet with a trial balance and adjusting and closing entries.

B8. Using the internet and Excel, students will study interest rates and the economics of setting the prime interest rate. A worksheet will be provided with instructions.

Constructing:

C1. Students will construct a spreadsheet comparing three different types of business organization with the advantages and disadvantages of each.

C2. Students will construct a Chart of Accounts for Studio Live using their knowledge of accounts and types of business organization.

C3. Students will construct a general ledger, a general journal, and a work sheet on Excel to be used as templates.

C4. Given a shoebox of source documents from the client, students will analyze and record transactions onto their general journals and post them to their general ledgers.

C5. Students will prepare a work sheet for Studio Live, calculate, record, and post adjusting and closing entries, and prepare a post-closing trial balance.

C6. Students will construct a balance sheet and an income statement for the fiscal period for Studio Live.

C7. Students will construct a power point presentation importing their financial statements and using graphs to represent the financial data.

C8. Students will prepare an Excel document comparing three different principal and interest scenarios.

C9. Students will prepare an actual loan application with accompanying financial statements and e-mail it to a local banker.

Sharing:

S1. Students will share with classmates which type of business organization best fits Studio Live and which type of business organization best fits Rider & Co.

S2. Students will share models of financial statements they find on the Internet with the rest of the class and tell why they are good examples and what purpose they serve.

S3. Students will present their power points to the rest of the class and justify their numbers from their financial statements.

S4. Students will share their loan applications with a local banker for feedback.

Content:

Based on Texas Essential Knowledge and Skills (TEKS)

§120.42. Accounting I

(c) Knowledge and skills.

(1) The student demonstrates an understanding of the accounting cycle for a service business. The student is expected to:

- (A) describe the purpose of accounting;
- (B) apply basic accounting concepts and terminology;
- (C) demonstrate the effects of transactions on the accounting equation, for example, T accounts;
- (D) prepare a chart of accounts;
- (E) apply information from source documents;
- (F) post general journal entries;
- (G) prepare a trial balance;
- (H) calculate and record end-of-period adjustments;
- (I) update accounts through adjusting and closing entries;
- (J) prepare a post-closing trial balance; and
- (K) prepare financial statements.

7) The student practices productivity skills as they apply to accounting. The student is expected to:

- (A) follow oral and written instructions;
- (B) develop time management skills by setting priorities for completing work as scheduled;
- (C) make decisions using appropriate accounting concepts;
- (D) explain the concepts of integrity and confidentiality as related to the accounting profession;
- (E) perform accounting procedures using manual and automated methods;
- (F) complete the accounting cycle within an assigned time frame; and
- (G) demonstrate use of the numeric keypad by touch.

§111.34. Geometry

(a) Basic understandings.

(5) Tools for geometric thinking. Techniques for working with spatial figures and their properties are essential in understanding underlying relationships. Students use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools, and technology (including, but not limited to, calculators with graphing capabilities, data collection devices, and computers) to solve meaningful problems by representing and transforming figures and analyzing relationships.

§111.32. Algebra I

(b) Knowledge and skills.

(1) Foundations for functions

- (D) represent relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities; and
- (E) interpret and make decisions, predictions, and critical judgments from functional relationships.

§118.2. Economics with Emphasis on the Free Enterprise System and Its Benefits, High School

(c) Knowledge and skills.

(8) Economics. The student understands the role of financial institutions in saving, investing, and borrowing. Tools:

Students will utilize the following list of programs during this unit:

- Microsoft Office Word 2007
- Microsoft Office Excel 2007
- Microsoft Office Power Point 2007
- Internet with Internet Explorer and/or Mozilla Firefox
- Century 21 Accounting – general journal approach
- Aplia software – replaces accounting workbooks with online activities
- Real Player or QuickTime to watch videos
- Google e-mail accounts

System of Assessments:

Although students will be observed continually as a form of assessment, rubrics will be used to assess the business organization comparison, the accounting cycle, and the financial statements. A rubric will be developed for the power point presentation and the bank loan application so students will know what is expected, but the assessment for those activities will come from peer critique and outside expert feedback. Background building activities using Aplia will be assessed through Aplia's internal assessment software which provides feedback to the students. Students will also self-assess what they have learned at the end of the unit.

Learning Environment:

The physical classroom environment consists of 24 computer stations (one per student) outlining the perimeter of the room and a large conference table in the center of the room for weekly "board meetings" and presentations. A bookcase of textbooks and a community printer are easily accessible to all students.

The intellectual environment is enhanced by the fact that all computers have internet access and a broad range of software including the Microsoft Office 2007 suite, Microsoft Publisher, PhotoStory, Audacity, Aplia Accounting, and Quickbooks. GoVenture Small Business simulation is currently being added. Net Support software is installed on the teacher computer to monitor computer and website use. Students are given daily freedom to check e-mails and explore the internet at the end of class.

The covert environment encourages every student to value the ideas and worth of each individual by having a set of social expectations for working collaboratively. Students are not allowed to show

disrespect with verbal “attacks” or innuendos. Diversity is celebrated and cooperation is crowned. The classmates will be considered “family” when it comes to working together.

To Do List:

1. Develop details of rubrics for assessment.
2. Make a list of websites with company financial statement examples or models.
3. Check working condition of computers and software.
4. Make sure websites are not blocked by school firewall. Submit unblock requests.