The lesson is intended for introductory accounting students, and corresponds to BTA 112 (“Principles of Accounting II”) at LaGuardia Community College. What follows is a summary of my learning goals, a lesson plan, and in class assignment.

1. Summary of Learning Goals

Knowledge and Conceptual Understanding

Distinguish absolute and relative numbers.

Thinking and Other Skills

Calculate relative numbers (percentage shares) using information found on the income statement and balance sheet.

Attitudes, Values, Dispositions and Habits of Mind

Use the relative number as the basis of an informed opinion. Exhibit a readiness to use quantitative analysis (specifically financial analysis) as a tool to make judgments in "real world" situations.

2. Lesson Plan

I’ll ask students the following: “Is it a problem that Company X has $500,000 in debt? Is it a problem that Company Y has $100,000,000 in debt?”

I expect that many students will mistakenly believe that there is a right or wrong question to this question.

I’ll ask, “Would it be a problem if you had $500,000 in debt?” Most students will probably think so. I’ll ask, “Would it be a problem if Microsoft had $500,000 in debt?” Most students probably won’t think that a problem.

Why isn’t it a problem for Microsoft? Why would it be a problem for you?

Possible answers that I suspect students will generate.

(1) Microsoft has lots of cash and other assets compared to me.
(2) Microsoft earns a great deal more money every year than me.

I’ll introduce the concept of relative vs absolute numbers.

Which of the following is an absolute number?

(a) My company's total debt is $25,000.
(b) My company's total debt is 3x last year's earnings.
(c) My company's debt is half its total assets.

Which of the above would you be most interested in if you were a loan officer at a bank considering making a loan to that company? Which piece of information would be least helpful? Why are relative numbers more useful in this context?

How would we express (b) & (c) in percentage terms, as a rate and as a proportion? What does creditworthy mean? Is a higher or lower percentage more or less creditworthy?

Is there other information we might want to know? Take a few moments to write down additional information you might like to know before approving a loan.

Possible answers:

(a) When is the debt due?
(b) What are the future prospects of the company?
(c) What is the size of the loan?
(d) What will the annual interest be for the loan?
(e) If the company defaults, who is "first in line" to be paid?
(f) Is the company very sensitive to changes in the economy?
(g) Does the company have non-operating assets that it could sell to pay back the loan?
(h) Is this limited liability corporation, or is a partnership/proprietorship with unlimited liability?

I will then introduce two common financial ratios:

(1) Debt to assets
(2) Times interest earned

Will these ratios yield absolute or relative numbers? Do we know where to find absolute numbers on the financial statements to calculate the relative numbers? Would they be of interest to a bank officer considering whether to make a loan? Why or why not?

We would calculate these numbers using the financial statements of two real companies of different sizes. The companies would have numbers corresponding to the questions I asked at the beginning of class.

Have we calculated absolute or relative numbers? What would be different ways (ratios, percentages, proportions) we could present these numbers?

What's better? A higher or lower number? Is your answer different for (1) and (2)?

3. <u>In class assignment</u>

(1) Mitt Romney says that his taxes are too high! After all, he paid $15 million in taxes last year on $100 million of income. During the same year, Jack the Plumber made $5,000 per month. At the end of the year, Jack paid taxes totaling $18,000. Who paid more in taxes, Jack or Mitt? Can you make an argument that Mitt paid more in taxes? Can you make an argument that Jack paid more in taxes?
(2) Here are the financial statements for X Company. Use the financial statements to calculate its debt to assets and times interest earned ratios in 2012 and 2011. Did X Company's financial position improve from 2011 or 2012? Justify your answer.

I'll ask students to switch papers and consider their neighbors point of view. I'll give students an opportunity to make revisions to their own answers based on their neighbors' work, and ask for volunteers to share their work with the class.