Present Value

SUBMITTED BY: WGYP Summer Educator

SUBJECT(S): Accounting

GRADE LEVEL(S): 9, 10, 11, 12

OVERVIEW:

Students are introduced to the idea of discounted cash flow (DCF) and learn about how it plays out in real businesses.

NBEA STANDARD(S):

- Accounting, VI. Interpretation and Use of Data

WHARTON GLOBAL YOUTH PROGRAM ARTICLE:

- "Why It Pays to Save: Knowing the Time Value of Money"

Common Core Standard(s):

- CCR Standard for Reading: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Objectives/Purposes: In this lesson, students will begin to interpret and use data. Students will learn about discounted cash flow and read about how it is used in companies. They will do some initial analysis of a company and then look at other companies.

Knowledge@Wharton Article: "Dot-Com Bubble, Part II? Why It's So Hard to Value Social Networking Sites"

Other Resources/Materials: Article Worksheet

Activity:

1. Do Now: When you see the phrase "discounted cash flow" what does that mean to you? Take your best guess. Write down your answers. (*5 mins*)

2. Teacher goes over present value, discounted cash flow and net present value. Go over all three, but the article and activity will focus primarily on DCF.

(*5 mins*)

- Present Value – Current worth of a future sum of money. The process of calculating present value, or discounting, is actually the opposite of finding the compounded future value. Present value has many important uses in regards to making decisions to invest. Another way of saying this is to think about what future money would be worth today. So you estimate what a company will make in the future and then determine what that is worth in today's time.
- Discounted Cash Flow – Value of expected cash receipts and expenditures at a certain date. Another way to think about it, is that DCF is a way to help determine the value of a company or stock based on thinking about cash-flow (when cash is coming in or leaving).
- Net Present Value (NPV) – Method applies a rate of discounted (interest rate) based on the marginal cost of capital to future cash flows to bring them back to present.

3. Teacher hands out the article and worksheet. Students in small groups are to read the article "Dot-Com Bubble, Part II? Why It's So Hard to Value Social Networking Sites" and complete the article worksheet. Question 2 on the worksheet asks students to select one of three companies that are discussed in the article. The teacher might decide to assign each group a company to make sure that each company is being covered. (*15 mins*)

4. Class will come back together and share the answers to the questions. Groups should present their work for question #2. (*5 – 10 mins*)

5. After going through the article, the teacher will have students work in small groups to brainstorm different companies and to try to give examples of how these terms apply to these specific companies. (*10 mins*)

6. Wrap Up: If you were to start your own business, what did you learn from today's lesson that would help you? Be specific.

Practice Outside of the Classroom:

A good extension would be for students to go home and research 2-3 companies and learn about their DCF.

What Worked and What I Would Do Differently: These terms might not be familiar to students. Having multiple examples of DCF and present value that students can relate to would be helpful.