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TRENDS

Teaching The Principles Course: A Special Challenge for Senior Faculty

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ARTICLES

Time-Value-of-Money—“Let’s Make a Deal”, Time-Line Diagrams and ‘Simple’ Formulas, and a Bond Pricing Example

Robert Derstine

College of Business

Kutztown University

Thomas Grant

College of Business

Kutztown University

A Mixed Methods Pedagogical Approach to an Introductory Course to IFRS

Stephen A. Coetzee*

Department of Accounting

University of Pretoria, South Africa

Astrid Schmulian

Department of Accounting

University of Pretoria, South Africa

Synchronous (Live) Class Sessions in Online Accounting Courses

Consolacion L. Fajardo, DPA

National University

TEACHING TECHNIQUES

A Reminder: It’s the Little Things

Gregory C. Yost

College of Business

University of West Florida

A Simplification and Visualization of Teaching the Direct Method for Computing Cash from Operations

George Romeo, Ph.D.

Department of Accounting

Rowan University

Da-Hsien Bao, Ph.D.

Department of Accounting

Rowan University

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Trends

TEACHING THE PRINCIPLES COURSE: A SPECIAL CHALLENGE FOR SENIOR FACULTY¹

By Belverd E. Needles, Jr.

The effective teaching of principles of accounting requires both talent and dedication. Although gifted individuals can be found anywhere in the ranks, the most experienced and talented teachers are usually assigned to upper division and graduate classes. Principles of accounting classes are often taught by part-time instructors, new Ph.D.s, or graduate students who, though dedicated, may not be the most appropriate teachers for the principles course. Because the first priority of part-time teachers has to be their full-time jobs, they may have difficulty developing innovative teaching techniques and maintaining regular contact with students. New Ph.D.s must put their research efforts ahead of teaching in order to gain tenure, and graduate students need to regard themselves as students first and teachers second. Moreover, new Ph.D.s and graduate students often do not have the experience necessary to undertake advanced teaching techniques. This leaves talented senior faculty members as the most logical choice to teach the principles classes. They alone have the experience and can put teaching as their top priority. But why should senior faculty members agree to teach the principles course when they can usually pick and choose any course they want?

Like many young professors, I was absorbed by the extent of my knowledge of accounting, when I began teaching more than 20 years ago. My desire was to teach upper level and graduate courses in order to work with more advanced students and center on my specialized areas. As my teaching skills matured, however, I came to realize that every class, no matter the level, holds special and intriguing challenges. Although at the upper level I now teach auditing, I have found that the principles of accounting course presents challenges that make it a very desirable teaching assignment. The following paragraphs will describe these challenges.

DIVERSITY OF STUDENTS

Whether the enrollment policy is open or restricted, principles of accounting classes are made up of a diverse group of individuals. They differ in age, maturity, educational background, career orientation, academic ability, desire to learn, and awareness of business concepts and values. Students in upper-level accounting courses, by contrast, tend to be more homogeneous, if only because as accounting majors they have gone through a filtering process that usually ensures similarity in their educational backgrounds, levels of ability, and reasons for taking the course.

The diversity found in a principles of accounting course makes it necessary for the teacher to present the subject matter in ways that will arouse the interest of all the

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students. Instead of trying to use different approaches to reach different sets of people, the teacher must pull information from the students about their backgrounds and goals and devise teaching methods that allow them to learn from each other. While making sure that the essential areas of accounting are covered, the teacher should also stress the impact of accounting information on other business disciplines. The key to dealing with such a diverse audience is to create an atmosphere of excitement and challenge in which all students recognize that their needs are being addressed.

MOTIVATION OF STUDENTS

In the principles of accounting course, motivating students to want to learn accounting is a major challenge for the teacher. Junior and senior accounting majors know the importance of developing high grade-point averages and of obtaining recommendations from senior professors. Moreover, their upper-division courses are more relevant to preparation for the CPA and CMA examinations. Because of their commitment to these goals, upper-division students will try hard to learn the material even if a class is taught in lackluster manner.

The typical principles-level student, on the other hand, is a non-accounting major who is taking the class because it is a required business core course. Most principles students have not formed career goals or chosen majors; this course is most likely their first exposure to the business curriculum. They may even dread taking the course. For these reasons, the principles course must develop the students' knowledge of both business and accounting, thus preparing a foundation upon which upper-division business course can build. The principles course must feature technology and on-line applications, class discussions, videos of business in action, field trips, business decision cases, and many other experiences that build analytical and critical thinking skills. Students are used to receiving information fast and short through text messages Twitter, Facebook, and other media. The teacher's goal should be to provide an exciting, continuously changing, fast-moving learning experience that makes accounting come alive so that it is more than just another hurdle to overcome.

THE OPPORTUNITY TO MAKE A DIFFERENCE

Student diversity, motivation, and knowledge and skills levels present daunting challenges for the principles teacher. It takes an experienced, talented teacher to turn them into a positive learning experience. The personal rewards of doing so are great. As a senior accounting faculty member, I have experienced inspiration by working with students at the advanced and principles levels. Seeing an accounting major perform well in class, pass a professional examination, and become a contributing member of a firm or company is a most satisfying part of being an accounting professor. At the principles level, the same degree of satisfaction can be achieved. The teacher's effort results in increased student maturity and confidence, enhanced knowledge of business and accounting, improved skills, and an appreciation of the role of accounting in society. The principles course is the point at which the senior faculty member can perhaps have the greatest impact on students' commitment to careers. Even though upper-level accounting majors face choices between public versus private accounting and industry versus government, and the like, their fundamental commitment to accounting has been formed

earlier, usually in the principles course. Thus, the final special challenge in teaching the principles course is to present a fair, balanced, and realistic picture of accounting careers in a way that will attract students who will do well in accounting.

Time-Value-of-Money--"Let's Make a Deal", Time-Line Diagrams and 'Simple' Formulas, and a Bond Pricing Example

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Students in introductory Financial Accounting frequently fail to appreciate the importance of time-value-of-money. They simply view time-value-of-money as a ‘memorize the formulas’ and plug in the numbers to solve a mathematical problem. The students frequently fail to ‘recognize’ the key information given in the problem and what is the ‘unknown’ they need to solve for. We use the following three techniques to: pique students interest in the topic, help students understand the ‘whys’ behind the calculations, and enable the students to solve many time-value-of-money problems without complex mathematical formulas or financial calculators:

- 1.) *Investing for Retirement* situations to illustrate the 'power' of time-value-of-money
- 2.) Television game show “Let’s Make a Deal” to identify factors underlying the determination of interest rates
- 3.) “Time-line diagram” and "simple" formulas

IMPACT OF TIME-VALUE-OF-MONEY

Set the scenario by asking the students which of the following retirement situations they would prefer for themselves. Describe three situations such as a retirement in: a shack in the woods without running water and electricity, a nice cottage on a small lake, or a mansion overlooking the beach on the French Rivera. Then provide the following slide* (or discussion).

Your favorite aunt just left you \$10,000 TODAY in her will. You invest the \$10,000 to earn interest at 20% compound annual interest rate. What total dollar amount will you have when you are ready to retire 30 YEARS FROM NOW?

Ask the students what they guess would be the dollar amount available at retirement. Would it be only enough for the shack in the woods, the nice cottage on a small lake, or the mansion of the Rivera? As some students have difficulty identifying the knowns and unknowns—stress the \$10,000 is NOW while the FUTURE VALUE OF THE KNOWN SINGLE AMOUNT is the unknown. Then release the solution—one digit at a time!

ANSWER = \$2,373,763.

The answer usually "gets the students attention" that maybe there is something of value to this time-value-of-money topic! Follow up with the second retirement scenario below—this time introducing an ‘annuity’ situation and emphasizing the impact of compounding by lengthening the time horizon.

If you invest \$200 **per month** starting today (at age 25), that earns 20% compounded annually, you would have invested a total of \$48,000 by age 45. At 45, when you retire, you would have \$494,402.

If you had started saving \$200 per month at age 20 (and thus invested \$12,000 extra over those 5 years), how much would you have at age 45?

You may at this point want to ‘mislead’ the students (but ultimately reveal the power of compounding) by suggesting the answer would be about \$120,000 more than the \$494,402. (Since the \$48,000 originally invested increased approximately ten fold to \$494,402, the additional \$12,000 invested over the extra 5 years supposedly also would increase approximately ten fold to \$120,000.) Now reveal the correct answer:

ANSWER = \$1,249,278

You may at this point ask the students “when should they start saving for retirement”. We’ve found most students at this point respond—“Now”! To finish the first section of the presentation, we present the following quote of Albert Einstein: “The most awesome power of the universe is that of COMPOUND INTEREST”!

THE INTEREST RATE

Now that you have the students' attention, change tactics to get them to explicitly realize the ‘whys’ behind time-value-of-money (interest). We use the TV game show “Let’s Make a Deal” to emphasize that not only is the AMOUNT of the cash flow (payment or receipt) important but the WHEN the cash flow is to occur and the UNCERTAINTY of the cash flow also are critical.

Playing the congenial game show host, tell the students what is behind each of the three doors before you ask them to make a choice:

DOOR #1	TODAY, I’LL GIVE YOU \$10.
DOOR #2	THREE YEARS FROM TODAY, I PROMISE TO GIVE YOU \$10.
DOOR #3	THREE YEARS FROM TODAY, I PROMISE TO GIVE YOU \$12.60.

Then ask the students between Door #1 and Door #2--Which Door “**Don’t**” You Want and WHY? Students almost universally say they prefer Door #1 over Door #2. The follow up “WHY” question forces them to list explicitly the reasoning behind their choice. Providing ‘hints’ as necessary, the three responses we are trying to solicit from the students are:

- 1.) Risk free rate of return -- \$10 invested today would ‘grow’ to be greater than \$10 after 3 years.
- 2.) Risk of inflation -- the \$10 received after 3 years would have less purchasing power over goods and services than the \$10 today
- 3.) Uncertainty risk -- there is some doubt about whether the \$10 *promised* after 3 years actually will be received

Finally, state that 8% annual compound interest will ‘perfectly compensate’ for the three risks above. Show the \$10 ‘growing’ to: \$10.80 after the first year (\$10 + \$.80 interest), \$11.66 after the second year (\$10.80 + \$.86), and \$12.60 after the third year (\$11.66 + \$.94 round). The difficult question to now ask the students is: ASSUMING 8% annual interest just perfectly compensates you for the three risk factors, which door do you want—Door #1 or Door #3. The correct answer is: “Door #1 and Door#3 are the same”. However, most students will take Door #1 claiming: I can invest the \$10 today, or the \$12.60 will have less purchasing power due to inflation, or I may never receive the promised \$12.60 in three years. To help them understand the three risk factors ‘are already integrated’ in the \$12.60 promised amount, replace the amount promised behind Door #3 to \$33.75. Now the amount of the difference between Door #1’s \$10 and Door #3’s promised \$33.75 is large enough to get many students to choose Door #3. Tell them there still is no difference between Door #1 and Door #3--ASSUMING 50% annual compound interest will ‘perfectly compensate’ for the three risks. [You may want to show the

proof: \$15. after one year (\$10. + \$5), \$22.50 after two years (\$15. + \$7.50), and \$33.75 (\$22.50 + \$11.25) after three years.]

TIME-LINE DIAGRAMS AND ‘SIMPLE’ FORMULAS

A combination of time-line-diagrams, and a “simple” form of time-value-of-money formulas, helps students recognize the ‘knowns’ and the ‘unknown’ of the problem and provides a relatively easy mathematical solution. For the original “Let’s Make a Deal” choice between Door #1 and Door #3, using the original 8% compound annual interest, prove that Door #3’s promise of \$12.60 three years from now is the ‘same’ as the \$10 current amount behind Door #1:

Present Value of a Single Future Amount

Now	1	2	3	$(P) = ?$ $\$12.60$	$P = \text{unknown present value}$ $F = \text{known future value}$ $n = \text{number of interest periods}$ $i = \text{interest rate per interest period}$
$P = F \text{ (Factor: } n=3, i \text{ (8\%)}, \text{ Table 1 on page 1334 of the 9}^{\text{th}} \text{ ed. of Needles' Fin. \& Mgl.)}$ $P = \$12.60 (.794)$ $P = \$10.$					

To broaden the number of situations that can be addressed, inform the students that when using any of the time-value-of-money tables from which the factors are obtained:

The rows ("n") refer to the number of interest time periods

The columns ("i") are the interest rate per interest period.

Thus to use the tables when compounding is other than annual:

"n" = number of compounding periods per year multiplied by the number of years

"i" = the annual interest rate divided by the number of interest periods in a year

We complete the time-line-diagrams and simple formulas by covering the present value of an ordinary annuity where an annuity is defined as: a series of periodic payments or receipts (called rents) of the same dollar amount each period, with the same-length interval between each rent, and the same interest rate applies to all the rents. For our ordinary annuity the rents occur at the end of each period.

Present Value of an Ordinary Annuity

Now	1	2	3	$(Pa) = ?$ $\$10 \quad \$10 \quad \$10$	$Pa = \text{present value of an annuity}$ $A = \text{annuity 'rent' (i.e., amount)}$ $n = \text{number of interest periods}$ $i = \text{interest rate per interest period}$
$Pa = A \text{ (Factor: } n=3, i \text{ (8\%)}, \text{ Table 2 on page 1336 of the 9}^{\text{th}} \text{ ed. of Needles' Fin. \& Mgl.)}$ $Pa = \$10.00 (2.577)$ $Pa = \$25.77$					

FINANCIAL ACCOUNTING APPLICATION--SELLING PRICE OF BOND

One of the more common uses of time-value-of-money calculations at the Financial Accounting level is the determination of the selling price of a bond (i.e., the calculation of the bond's present value). Once students grasp the distinction that the face value will only be received one time (at the end of the life of the bond) and the interest payments are an ordinary annuity, then the process of explaining how to calculate the bond's selling price makes more sense to them. The time-line diagrams (and 'simple' formulas) previously presented are used:

- 1.) Present Value of a Single Future Amount--used to discount the maturity value of the bond (i.e., the face value to be received at the end of the bond's life). In other words, how much is a bond investor willing to pay today for the single promised dollar amount at the end of the bond's life?
- 2.) Present Value of an Ordinary Annuity--used to discount the periodic interest payments to be received over the life of the bond. In other words, how much is an investor willing to pay today for the promised interest payments (i.e., an annuity)?

JME ENTERPRISES BOND ISSUE -- AN EXAMPLE

JME Enterprises' operations are not providing sufficient funds and JME has decided to try to borrow the needed funds by issuing bonds. Details of the bond issue are:

Life of the bond = 5 years

Face value (aka. maturity value) = \$5,000,000 (the single dollar amount promised by JME to the bond investors at the end of the life of the bond--in this case 5 years)

"Cash" interest rate (aka. the stated or contract interest rate) = 6% annual cash interest rate (but interest payments made semi-annually--thus \$150,000 cash interest promised to the bond investor at the end of each of the next ten 6-months interest periods).

$\$150,000 = \$5,000,000 \text{ face value} \times 6\% \text{ cash interest rate} \times 6/12$

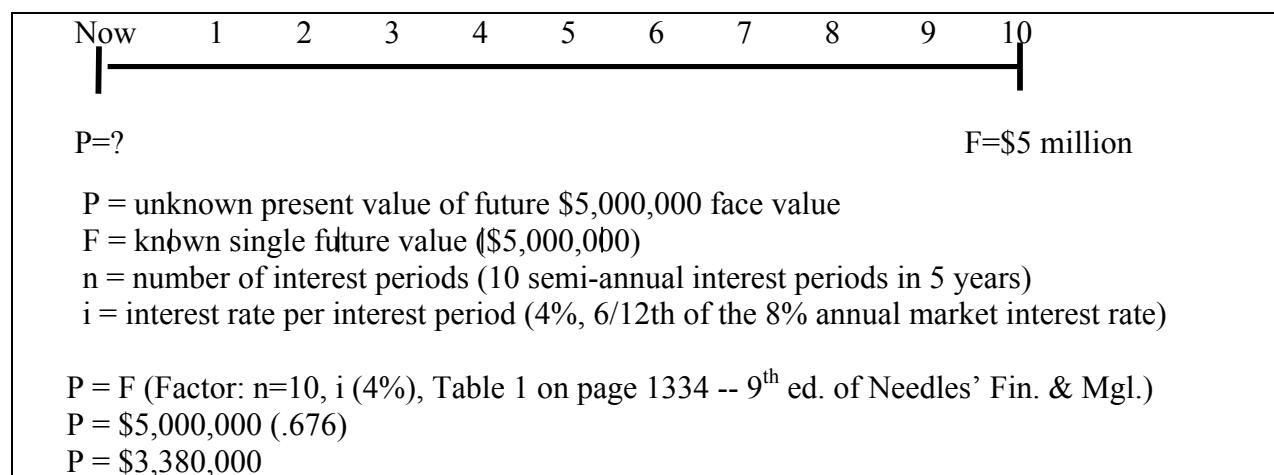
Current "Market" rate of interest on bonds of a similar default risk = 8% annual interest (but interest payments made semi-annually)

Although investors in JME's bonds are promised a total future amount of \$6,500,000 (\$5,000,000 face value + \$1,500,000 [10 semi-annual interest payment of \$150,000]), ask students if they would be willing to pay (lend) \$6,500,000 to JME today to purchase the bond. If they fail to grasp the impact of time-value-of money, return to the "Let's Make a Deal" game above. You also may want to review the concept of an interest rate that "just perfectly compensates for the three risk factors": 1.) Risk free rate of return, 2.) Risk of inflation, and 3.) Uncertainty risk (risk of default---non-payment of the promised future cash flows).

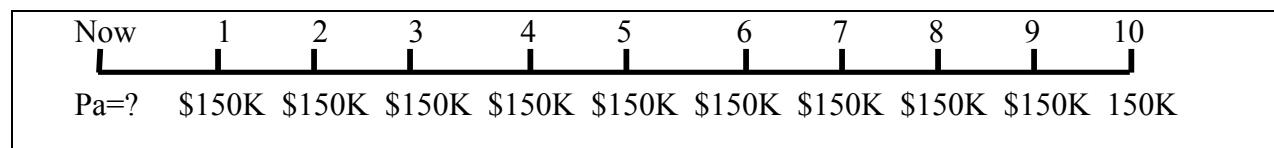
At this point, stress that the present value of the future payments (face value plus interest payments) is what determines a "fair" selling price – one that both JME, the borrowing company issuing the bonds, and the lenders (the bond investors) can agree would compensate for the time-value-of-money. If the current market rate of interest was identical to the 6% cash interest rate promised by JME, the fair selling price would be the \$5,000,000 face value. The bonds investors

would earn 6% by buying JME's bonds and receiving the promised \$5,000,000 face value at maturity and \$150,000 in cash interest at the end of each of the next ten semi-annual periods. However, the market rate of interest is 8% on the date JME tries to sell their bonds. Ask the students if they were bond investors would they be willing to accept JME's promised 6% cash interest rate if other bond investments were offered that were yielding 8% interest (with the same risk of default) as JME's 6% bonds. Students usually quickly see the logic of choosing the 8% bond investment, rather than JME's 6% bond. In order for JME to be able to sell their 6% cash rate bonds (the cash rate can not be changed--it is 'locked in' by contract) there must be a mechanism to convert JME's 6% bonds into a deal that would return to the bond investors the 8% they could earn elsewhere. Although the cash interest rate of the JME bonds is 'locked in', the selling price does not have to be equal to the face value of the bonds. Thus the mechanism to make the JME bonds saleable is to find the selling price of the bonds by calculating the present value of the promised future cash flows (both face value and interest) using the current market rate on similar risk bonds as the discount (interest) rate. Emphasize to the students that the important keys in calculating the selling price of the bonds are the dollar amounts promised by JME and when in the future they are promised, plus the market rate of interest on bonds of a similar default risk that is in effect on the date JME sells the bonds to the bond investors.

Present Value of a Single Future Amount (Present value of \$5 million face value to be received in 5 years--at the end of the 10th semi-annual interest period)



Present Value of an Ordinary Annuity (Present value of the \$150,000 interest payments to be received at the end of each of the next 10 semi-annual periods)



P_A = unknown present value of ordinary annuity

A = annuity 'rent' (the series of ten semi-annual \$150,000 interest payments)

n = number of interest periods (10 semi-annual interest periods in 5 years)

i = interest rate per interest period (4%, 6/12th of the 8% annual market interest rate)

$P_A = A$ (Factor: $n=10$, i (4%), Table 2 on page 1336 -- 9th ed. of Needles' Fin. & Mgl.)

$P_A = \$150,000$ (8.111)

$P_A = \$1,216,650$

The selling price of the JME bonds would be = \$4,596,650

\$3,380,000 Present value of face amount promised at the end of 5 years

+ 1,216,650 Present value of 10 semi-annual interest payments of \$150K

\$4,596,650

**The power point slides (with custom animation) are available by contacting the authors at
derstine@kutztown.edu or grant@kutztown.edu

**A MIXED METHODS PEDAGOGICAL APPROACH TO AN INTRODUCTORY
COURSE TO IFRS**

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INTRODUCTION

International Financial Reporting Standards (IFRS) have been adopted by more than 100 countries across the globe. One of the few remaining economic powers yet to adopt IFRS is the United States. The likelihood of IFRS adoption in the US increased in 2007 when the Securities and Exchange Commission (SEC) removed the requirement for non-US companies registered in the United States to reconcile their financial reports with US GAAP, should their accounts comply with IFRS. In addition the SEC is considering possible incorporation of IFRS into the US domestic financial reporting system from approximately 2015 or 2016 (SEC 2010). Consequently, US colleges and universities are paying increasing attention to IFRS and the incorporation thereof into their accounting education programs. A recent survey of US academics suggested that more than half of the respondents expected IFRS to have been significantly incorporated into their curricula by 2011 (Munter and Reckers 2009). When incorporating IFRS into their curricula, these academics will need to select appropriate pedagogy to support IFRS's inclusion. Given that the objective of the International Accounting Standards Board (IASB) is '*to develop a single set of high quality, understandable, enforceable and globally accepted financial reporting standards based upon clearly articulated principles*' we propose that IFRS education too be principle-based.

PRINCIPLE-BASED IFRS EDUCATION

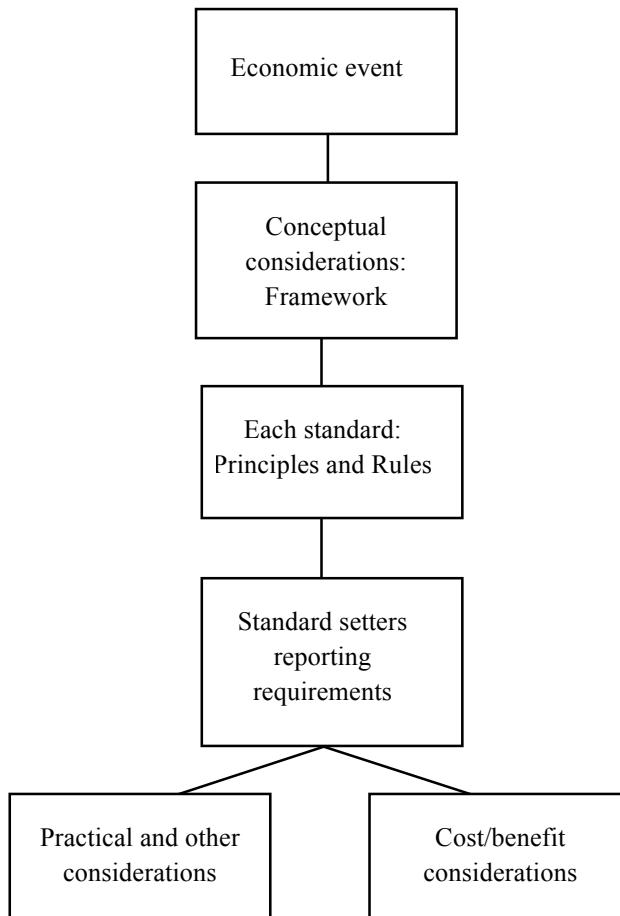
Based on the advice provided by Barth (2008), detailing how academics should educate students for global financial reporting, we provide the following framework for principle-based IFRS education (Figure 1):

- Identify an economic event that needs to be reported to outside providers of capital.
- Ensure that the students have a thorough understanding of the particular economic event.
- Teach the students the concepts as contained in the *Framework for the Preparation and Presentation of Financial Statements*.
- Illustrate how the principles in a particular Standard, reporting on an economic event, are based on the concepts.
- Discuss how the rules of the Standard are developed based on these principles.
- Demonstrate that the rules are not always based on concepts and principles but may be influenced by practical and cost/benefit considerations.

Based on the premise that principle-based Standards often do not result in a single correct answer, Barth (2008) emphasized that principle-based IFRS education must ensure that students develop their ability to apply judgment. In addition to judgment, accounting education literature has identified numerous skills that are critical to the success of a modern accounting professional. These skills include intellectual skills, technical and functional skills, personal skills, interpersonal and communication skills and organizational and business management skills (IAESB, 2010). Researchers have developed several interventions that may be employed by accounting educators to encourage the development of these skills. Examples of these interventions include: simulations and role plays (Sergenian and Pant 1998; Fortin and Legault 2009); problem-based learning (Milne and McConnel 2001; Hansen 2006); cooperative-based learning (Kennedy and Dull 2008; Riordan *et al.* 2008); case analysis with alternative solutions (Boyce *et al.* 2001), and oral presentations (Bonk and

Smith 1998). These interventions are located within the domain of student-centered pedagogy, where students are actively involved in the learning process. We therefore propose a student-centered, principle-based approach to IFRS education to achieve the objective of preparing students for their roles in the financial reporting environment in which they will operate.

FIGURE 2
Principles-based approach to IFRS education



THE INFLUENCE OF THE PROFESSION

While advocating the abovementioned pedagogy for IFRS education, the authors acknowledge that there may be alternative driving forces in the selection of pedagogy for IFRS education. Cooper et al. (2008, 379), for example, contends that the '*profession has largely downloaded accounting training on universities; with one consequence being that the AICPA's Uniform Exam strongly influences the curriculum*'. As such, many an accounting education course has as its objective the preparation of students for a professional qualifying examination. Professional qualifying examinations have traditionally been rule-based, presenting fictitious scenarios with a single correct solution (Bonk and Smith 1998, Botha 2001). This method of assessment implicitly, and perhaps unrealistically, implies that to every possible business scenario a single correct way to account for that scenario must exist (Carmona and Trombetta 2010). Therefore assessment of this nature lends itself to rote-

learning and teacher-centered pedagogy (Bonk and Smith 1998, Botha 2001). In a teacher-centered classroom students generally assume a passive role as the lecturer attempts to impart vast amounts of technical knowledge to prepare them for the professional qualifying examination (Bonk and Smith 1998).

A further consideration in selecting appropriate pedagogy may be that while the objective of the IASB is to develop principle-based Standards, many of the existing Standards, or at least components thereof, may still be viewed as rule-based (Conrod 2010). These Standards may therefore be more suited to teacher-centered pedagogy.

MIXED METHODS OF PEDAGOGY

In instances where rule-based Standards or components thereof, are lectured or when rule-based professional qualifying examinations need to be considered, we propose a mixed method of pedagogy, incorporating both student-centered, principle-based pedagogy and teacher-centered, rule-based pedagogy. The remainder of this paper illustrates, by using the abovementioned framework for principle-based IFRS education (Figure 1), how mixed methods of pedagogy have been employed in an *Introductory Course to IFRS*¹.

Identify an economic event that needs to be reported to outside providers of capital

The economic events refer to the topics incorporated in the *Introductory Course to IFRS*. These topics are based on those prescribed by the profession and are necessary to provide the students with a foundation for the remaining two years of study, prior to writing the professional qualifying examination. Examples of topics included are: *inventories, leases, property, plant and equipment, provisions and revenue*.

Ensure that the students have a thorough understanding of the particular economic event

Students are provided with definitions of the economic event (for example: “lease”) from various sources, other than the Standards, such as dictionaries. The students are encouraged, where possible, to source ‘real life’ examples of the economic event under consideration. Utilizing such realistic examples creates awareness in the students that accounting, and the financial reporting component thereof, is situated in society and interacts with society. A limited number of students are then randomly selected to present their examples to the class with the objective of demonstrating the economic characteristics of the particular economic event. The lecturer then summarizes the characteristics presented, in addition to adding those perhaps not highlighted, to ensure the students have a reasonably sound knowledge of the economic event to be reported on.

Teach the students the concepts as contained in the Framework for the Preparation and Presentation of Financial Statements

¹ Students taking this course have completed a bookkeeping course but have not yet been introduced to financial reporting standards.

The *Framework for the Preparation and Presentation of Financial Statements* has traditionally been lectured at the beginning of the course, employing teacher-centered pedagogy. This has remained the case to ensure the students acquire the necessary knowledge of the concepts as contained in the Framework. The development of a thorough understanding of these concepts takes place through the integration of the concepts with the principles for each economic event considered (discussed below).

Illustrate how the principles in a particular Standard, reporting on an economic event, are based on the underlying concepts

Given that the students are new to financial reporting and have not yet mastered the ability to relate the relevant concepts to the principles of a particular Standard, the students are provided with various assignment projects to develop this skill. The incorporation of financial reporting literature in these assignments has proven particularly useful in demonstrating to the students how the concepts underlie the principles in a particular Standard. The literature used must be carefully selected as the students, in an introductory course, generally do not have any significant statistical knowledge nor do they have any prior research experience. Examples of papers utilized in the *Introductory Course to IFRS* include:

- Monson D.W. 2001. The Conceptual Framework and Accounting for Leases. *Accounting Horizons*, 15(3), 275 – 287.
- Nobes C. 2005. Rules-based Standards and the Lack of Principles in Accounting. *Accounting Horizons*, 19(1), 25 – 34.
- Schipper K.A., Schrand C.M., Shevlin, T. and Wilks T.J. 2009. Reconsidering Revenue Recognition. *Accounting Horizons*, 23(1), 55 – 68.
- Wustemann J.W. and Kierzak S. 2010. Revenue Recognition under IFRS Revisited: Conceptual Models, Current Proposals and Practical Consequences, *Accounting in Europe*, 2: 1, 69 – 106.

In addition, discussion papers and exposure drafts issued by the IASB may also aid in assisting the students to understand how the concepts of the *Framework for the Preparation and Presentation of Financial Statements* underlie the principles of a particular Standard.

After studying the sources relevant to a particular topic, the assignment projects require the students to perform a variety of tasks. In certain instances these are to be completed individually, in others cooperatively. Examples of the tasks include:

- Preparing illustrative journal entries for various methods of financial reporting proposed in the literature and contrasting the effect on the financial statements.
- Providing written responses (or oral responses taking the form of a presentation or a debate) to leading questions such as:
“Should ‘substance over form’ or the asset and liability definitions, as contained in the Framework for the Preparation and Presentation of Financial Statement, be the primary principle underlying the development of the new leases standard by the IASB?
- Drafting mock commentary letters to the IASB in response to a particular discussion paper or exposure draft suggesting the method of financial reporting considered to be conceptually superior, based the literature consulted, and which would the student/s would encourage the IASB to adopt.

As the interventions discussed are for an *Introductory Course to IFRS* the development of a student's ability to exercise judgment in particular scenarios remains in its infancy and requires further development in subsequent courses. The *Introductory Course to IFRS* focuses on equipping the students with the ability to understand the application of concepts in the development of principles and rules and to ensure that the students are fully aware that there may be more than one appropriate response to a given financial reporting challenge.

Discuss how the rules of the Standard are developed based on these principles

Given the pressures a rule-based written professional qualifying examination, this section generally retains the nature of the lecturer imparting the IFRS rules to the students via PowerPoint presentations, supported by text-book based examples, illustrating the application of the rule in a fictitious, single answer scenario. Despite the lecturer not formally planning for much discussion, it has been noted that some discussion ultimately develops as to the suitability of the rules in terms of the underlying principles. Discussion of this nature is unsurprising given the previous interventions of principle-based approach to IFRS education. The lecturer however retains tight control over these discussions to ensure the topic is completed on time, yet allowing the students the opportunity to clearly understand the standard setting process.

Demonstrate that the rules are not always based on concepts and principles but may be influenced by other political and cost/benefit considerations

During the discussion of the rules above, students become increasingly adept at identifying rules which are not in line with any principle or concept. Generally a suitable response to these concerns can be found by referring the student to the Basis of Conclusions supporting a particular Standard. Alternatively, accounting literature, professional journals and the popular press may be useful in illustrating to the students political pressures and other historical events that may have influenced the standard setters at the time of drafting the Standard.

CONCLUSION

To prepare students for both a rule-based professional examination and for the fluidity of the financial reporting environment in which they will one day operate, a mixed method of pedagogy is advocated. In order to develop the pertinent professional skills, the students are continually challenged by a variety of interventions such as co-operative based learning, role play and oral presentations. Students are therefore required to take more responsibility for their learning and the lecturer acts as a facilitator for knowledge development rather than a conveyor of knowledge. In instances where the conveying of rule-based knowledge is required, teacher-centered pedagogy may be employed. However when reverting to teacher-centered pedagogy the following comment by Baxter (1979) should be considered:

"Standards are a godsend to the feebler type of writer and teacher who finds it easier to recite a creed than to analyze facts and to engage in argument. If an official answer is

available to a problem, why should a teacher confuse examination candidates with rival views? Thus learning by rote replaces reason; the good student of today is he who can parrot most rules. On this spare diet, accounting students are not likely to develop the habits of reasoning and skepticism that education should instill.”

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SYNCHRONOUS (LIVE) CLASS SESSIONS IN ONLINE ACCOUNTING COURSES

by

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INTRODUCTION

This article focuses on the incorporation of synchronous (live) sessions in online accounting courses to provide what is termed a voice/visual learning environment. The technology allows application sharing whereby instructors can show on their computer screens virtually any software application including Power Point Presentations, Word documents, and Excel spread sheets. Both instructors and the students should have a combination of head sets and microphones. Andragogy and engagement theories emphasize the importance of students being actively engaged in the learning process.

THEORETICAL FOUNDATIONS

Andragogy

Andragogy is the art and science of helping adults learn. It focuses on the characteristics of adult learners and a set of assumptions for most effectively teaching adults: *self-concept, experience, readiness to learn, orientation to learning, and motivation*. The essence of the theory is that the adult learners need to be self-motivated and to be active participants in their own learning (Knowles et al, 2005).

Engagement Theory

Kearsley (2000) in his Engagement Theory posits that the learner must be actively engaged in a meaningful task to achieve effective learning. It states that all learning must have three important characteristics: (1) collaboration or the interaction among students, teachers, and subject-matter experts via e-mail, discussion forums, and conferencing, (2) problem-based, which means that all student activities involve completing assignments or projects rather than just taking tests or exams, and (3) authenticity where all course materials and activities are realistic and directly related to the student's interests.

In another study, Durrington et al. (2006) describes how to establish an interactive online learning environment and provide strategies for increasing student interactivity. One of the strategies is problem-based learning in a synchronous chat room environment in which the exchange of ideas is encouraged and each member of the class participates in developing solutions to the problem. Durrington finds that students demonstrate more positive attitudes and higher levels of performance when classes are highly interactive.

PROBLEM STATEMENT AND PURPOSE OF THIS STUDY

The Sloan (2006) report showed that about 80% of students taking online courses are at the undergraduate level. The bulk of online students are adult or “non-traditional” learners, and more than 70% of those surveyed said that online education reaches students not served by face-to-face programs (Elaine & Seaman, 2006).

In a totally asynchronous online environment, there are no live class sessions in which instruction and live interaction take place. The principal means of student/instructor interaction is through threaded discussions in which instructors periodically post discussion questions, and students generally have a few days to post responses to the instructor and to interact on the responses of their classmates. However, threaded discussions do not provide the means by which an instructor can orally explain principles and processes, or illustrate concepts with visuals such as a whiteboard, spreadsheet, PowerPoint presentations and the like. Instructors are unable to get instant feedback from students to determine the degree of understanding of the subject matter being discussed. There is the absence of lively interchange of ideas.

The purpose of this study is to describe a new, emerging dimension of teaching/learning strategy to accounting online courses in the form of synchronous (live) class sessions known as voice/visual learning environment to increase interactivity and improve the learning experience of the students in the virtual classrooms.

SYNCHRONOUS (LIVE) CLASS SESSIONS

To overcome the limitations of what is essentially a two-dimensional text-based learning environment, some universities are adding a third dimension to their online courses in the form of synchronous (live) class sessions to provide what is called a voice/visual learning environment. National University, a private, non-profit and non-traditional university of higher learning offers a unique one-course-a-month format that caters to the educational needs of adult learners. The average age of students is thirty-five. It started offering online classes in 1999 in the School of Business and Management that included accounting course EXE 682, a combination of financial and managerial accounting in the MBA program. The use of VoIP (Voice over Internet Protocol) technology for voice/visual chat sessions started with a single online course in July, 2005. In the second half of 2005, 10% of the online classes used VoIP. In the first half of 2006, 30% used VoIP, and the second half of 2006, the percentage doubled to 60% (National University, 2007). While instructors are encouraged to use VoIP technology to provide students with a voice/visual learning environment, the use of VoIP is not mandatory, and some faculty members still prefer the text based chat sessions, perhaps because they are more comfortable with that environment.

The Process

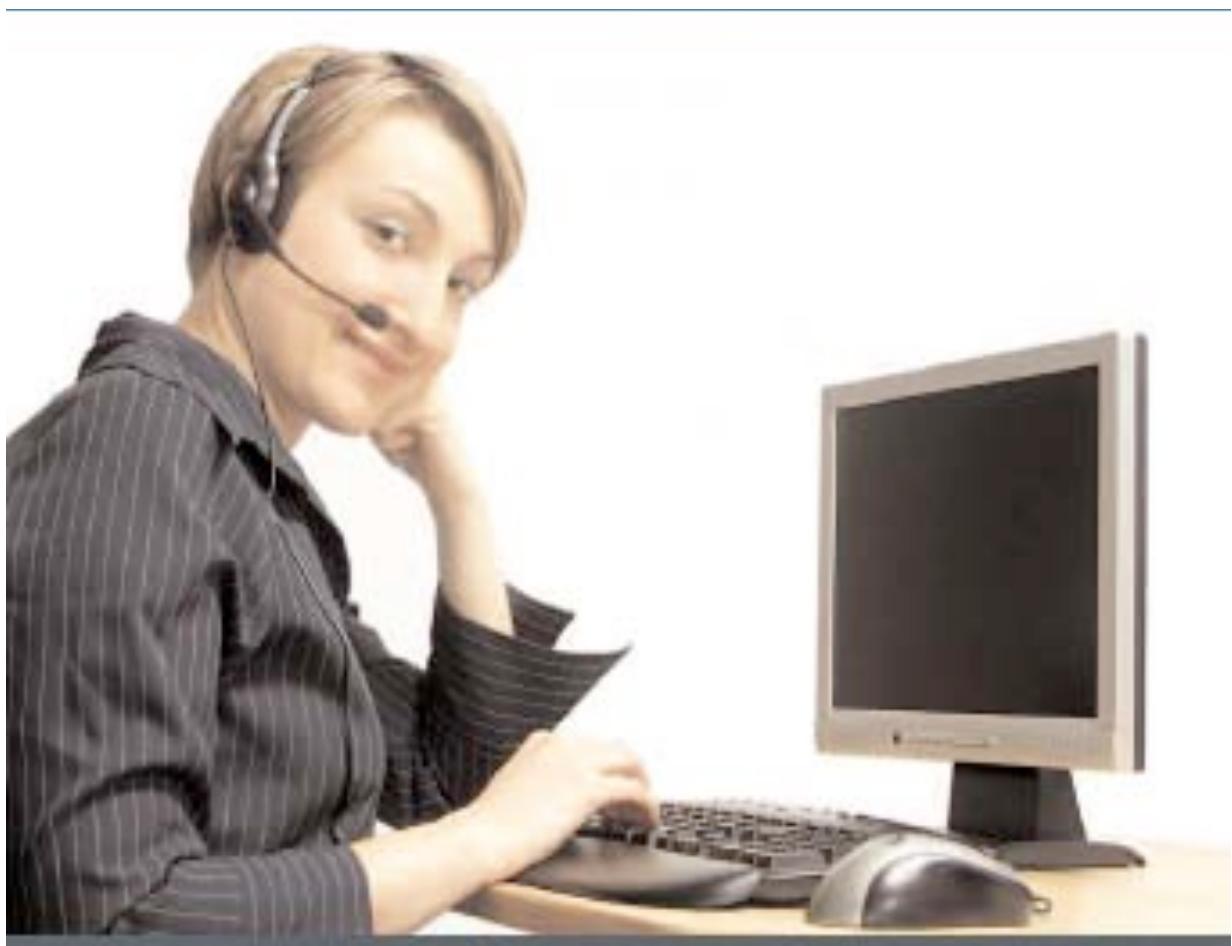
The technology currently being used at National University is *Elluminate*. Elluminate and other programs similar to it allow students a variety of options that were not available in early online classrooms. During the synchronous live chats sessions, students can be given moderator privilege to have access on the white board to write messages or share information.

With a simple mouse click, students can raise their hands. The instructor will see a number beside each student's name with the order they raised their hands and can answer questions in that order, ensuring every student is given the opportunity to participate. If a student needs to step away from the computer, he or she can indicate his absence by clicking on the "Away" icon. They can also "clap" or give a "thumbs up" or "thumbs down" sign, just to name a few of the options. Other interesting features include "quizzes" and "polls." These enable the instructor to get immediate feedback from students by posting short questions. Students can give immediate feedback to the instructor. If many students indicate that they do not understand the material by clicking an "X" or the red button, the instructor can provide further explanation. If students indicate that they have understood the topic being discussed by clicking the YES or green check, the teacher can proceed with the rest of the planned activities for the session. The teacher can also print the attendee list for grading purposes.

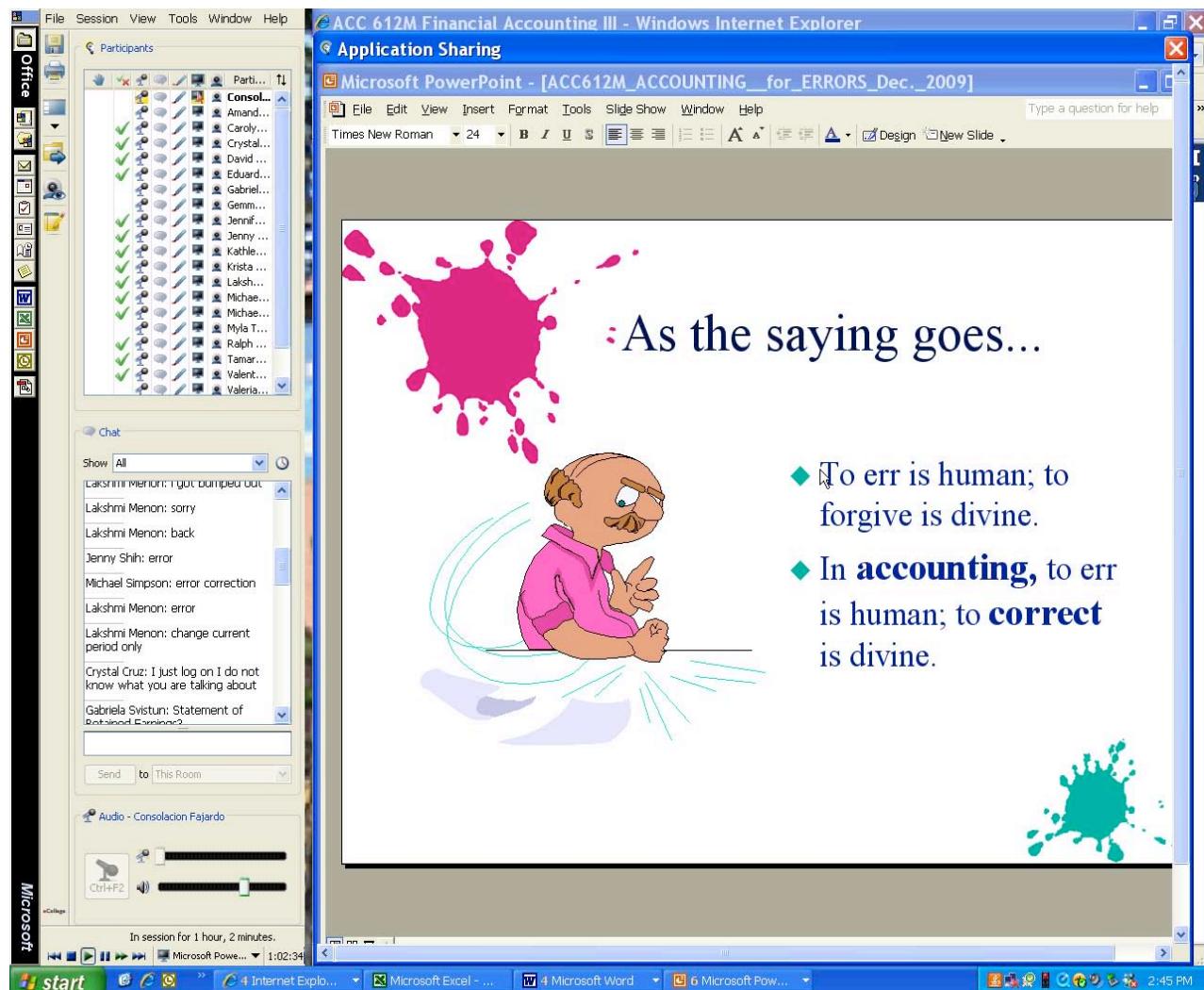
The chats are *learning chats*, not just chats without any direction or desired outcomes. Chats are conducted similar to class recitations in on-ground classes. The students may raise their hands or once in a while the instructor may call on a student to respond and only that student must respond. In this manner, the other members of the class can focus on the response of a particular student. Exercises and problems assigned for the chats are required to be solved by students in advance to maximize their learning. Students can ask questions or interact with another student's response and get immediate feedback. Complete solutions for chats exercises and problems are posted after each chat in addition to the recorded chats sessions.

Required Equipment

Both instructors and the students should have a combination of headsets and microphones. There is no charge for the software. Students and instructors communicate by using a combination headset and microphone connected to their computers. This live environment allows students to ask questions while an instructor is presenting a lecture. For instance, an instructor may show a PowerPoint presentation during the lecture. If a student has a question, he can ask it during the session and get immediate feedback. The advantage is that there is no lag-time in student/teacher responses and learning is immediate.



Sample of Instructor's Illustration Using Power Point Presentation



On the left palette, the instructor can view students who have logged-in to the chat session. Through Application Sharing, the instructor will have the ability to make oral demonstrations and illustration using Power Point Presentation, Word Document, Excel Spread Sheet, and the like. To application share, the instructor should first save the file on the desk top. The file must be opened and maximized and re-sized to fit the page with the students' list visible to allow for interaction. Similarly, students can also be given moderator privilege by the faculty to present solutions to problems, exercises, cases, and the like. Ideally, two microphones are opened by the instructor—one for himself/herself and another one for the students. To maximize learning, it is suggested that only two microphones be opened. This will pave the way for orderly discussions and avoid the problem of everybody talking at the same time. Students participate by raising their hand. As the student click the Palm (indicating raised hand) numbers will appear beside their names indicating the numerical order of who raised the hand first and to be recognized to speak. The instructor then allows the student to click the audio button to allow the student to ask questions or interact with other student's responses. According to educators,

the more senses students utilize, the better the comprehension and retention. Thus, in the synchronous live sessions, students are using the senses of seeing and listening, in addition to critical thinking. This synchronous class (live) sessions give students from around the world the opportunity to participate in cyber space and experience the feeling similar to that of being in a traditional onsite classroom.

Recorded Live (Class) Sessions

Session Date	Title	Start Time *	Duration	Session Leader	Download	Delete
Thursday, June 24, 2010	CHAT 8	7:10:11 PM	117 minutes	Fajardo, Consolacion	Download	Delete
Tuesday, June 22, 2010	CHAT 7	6:57:14 PM	147 minutes	Fajardo, Consolacion	Download	Delete
Thursday, June 17, 2010	CHAT 6	7:15:29 PM	138 minutes	Fajardo, Consolacion	Download	Delete
Tuesday, June 15, 2010	CHAT 5	7:13:40 PM	143 minutes	Fajardo, Consolacion	Download	Delete
Thursday, June 10, 2010	CHAT 4	7:06:30 PM	163 minutes	Fajardo, Consolacion	Download	Delete
Tuesday, June 08, 2010	CHAT 3	7:10:06 PM	133 minutes	Fajardo, Consolacion	Download	Delete
Thursday, June 03, 2010	CHAT 2	7:14:12 PM	140 minutes	Fajardo, Consolacion	Download	Delete
Tuesday, June 01, 2010	CHAT 1	7:14:44 PM	148 minutes	Fajardo, Consolacion	Download	Delete

* Times are displayed in (GMT-07:00) Mountain Time (US & Canada)

At National University's Accounting and Finance Department, faculty are encouraged to incorporate synchronous live sessions in their online classes to be scheduled once or twice a week either on Tuesday and Thursday or Monday Wednesday from 6:30 PM-8:30 PM. Students are expected to participate in all chats and are graded based on the quality of their participation. The chats are automatically recorded. The faculty has the option to delete any chat. Under, File function, the instructor can print the list of participants which is very useful especially if the class has a big number of students. Students, who are unable to participate in a particular chat, can make-up the missed chat by listening to the recorded chat and preparing one to two page comprehensive summary of what were discussed in the chat.

CONCLUSIONS

With the rapid growth of online programs, many universities are integrating live learning experience into their online courses that allows teachers and students to connect and interact in real time around the globe. Active learning has become a significant concept in the virtual classrooms. Synchronous (live) class sessions offer more opportunity for students to be actively engaged in the learning process (Kearsley, 2000) and facilitate their successful completion of online courses. Studies indicate that students demonstrate more positive attitude and higher level of performance when online classes are highly interactive (Durrington, et al, 2006). These synchronous highly interactive live class sessions provide a learning/teaching environment that is comparable to the traditional face-to-face classroom experience.

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A REMINDER: IT'S THE LITTLE THINGS

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Students actually do sometimes listen to what we say and observe what we do. In addition to learning accounting in the introductory course, students often take away life lessons that have nothing to do with accounting per se. These intended and even unintended messages about behavior, attitude, philosophy, and so many other issues may initially appear as little things of no lasting importance. But in spite of the pressures of outcomes assessment on faculty, and perhaps because of the heuristic experience for students, these little things can be big. The purpose of this paper is to remind instructors about the importance of these little things.

LITTLE THINGS

Accounting instructors teaching the beginning accounting course face a difficult challenge. Often faced with large classes comprised of many students who would prefer not to be there, teachers are charged with introducing what is essentially a foreign language and developing students' reasoning abilities within that language. Basic concepts underlying the accounting measurement process, and the measurement and reporting processes themselves, are more often than not the primary focus of the course. And that is as it should be. But after more than thirty years in the classroom, I am reminded that there is another dimension to the introductory course that can have life-long implications.

To paraphrase James Carville's advice (it's the economy, stupid) to Bill Clinton, "it's the little things, teacher." Most students going through the first course in accounting will not be accountants. Many will never make business decisions predicated on accounting information. At the time they are in the course, few even know what their major will be. But long after the debits and credits and statement formats have been forgotten, intentional and even unintentional messages from the instructor will be remembered. Whether or not course content was mastered, all of us have memories of something a teacher said that had little or nothing to do with course content. These messages can vary from the meaning of life to how to interview for a job; from learning from failure to ethical conduct. Positive or negative, these messages are etched in our minds. And they affect our daily lives.

Importantly, these messages are generally not in the text or formal solutions to problems assigned. The nature and content of these messages, what might be called "the little things", may in fact be the big things and what ultimately become the lasting imprints of this first course. Yet in an environment emphasizing outcomes assessments and quantifiable measurements of learning, where many have disdain for student evaluations, where students are more likely to communicate with faculty via email rather than in a face-to-face conversation, and where institutional demands for class size and scholarly production escalate, these little things can fall by the wayside. Now, more than ever, faculty must be cognizant of the positive, and negative, potential of these little things. Surely our role is to be more than mere purveyors of content.

I was recently reminded of the importance of these little things when a student sent me a note of thanks and referenced a quote from Montaigne about the measure of a man's life that I had posted on my office door. This quote was a little thing. But apparently reinforced by off-hand comments I had made in class, the quote had profoundly affected this young man. This young man had never been to my office but had noticed and read the quote at some time. About the same time I received a call from a former student referencing comments I had made in a casual conversation during a break in a three-hour class meeting. The comments dealt with, of all things, my views on the goal of youth competitive swimming. This young lady now had children competing and reported the impact of my comments on her approach in guiding her children. The first instance evidenced an intended outcome that will never be measured by the outcomes measurement process. The second instance evidences the unintended consequences even our casual comments can have. Both reflect the heuristic nature of their educational experience.

HEURISTIC NATURE

At the time they sit in our classrooms, students are engaged in perhaps the most intense heuristic period of their lives. They are searching to find themselves -- their passions, gifts, talents. As instructors we can and should assist in that process. But the question is: How? The answer lies, in part, in the little things.

It is important for us, as instructors, to recognize that few of the 19 and 20 year-olds sitting in class before us really know what they want to do with their lives. Unlike those students drawn to the arts, sciences, and engineering, students entering a beginning accounting class seldom have a definitive idea of their major and, if they do, it is probably ill conceived. As a result, they struggle to find relevance in the content of the course. In turn, we must acknowledge this struggle. Starting with the idea that "anything worth doing is worth doing right," I periodically challenge students to decide if, for them, accounting, or business in general, is worth doing. Because of parental or peer pressure, students frequently are reluctant to follow their hearts. As instructors we need to reassure students that it is okay to question their choice of courses and majors.

INTENDED OUTCOMES

By nature, textbooks rightfully present the technical aspects of accounting. As instructors in an accounting course, our job is certainly to assist the student in mastering this content by interpreting, explaining, and illustrating concepts and processes. But the instructor's role must be more than that. Surely accounting courses can be and should be more than mere trade school experiences. Each of us has a personal philosophy and moral compass from which we operate. And while our job is not to preach to students, it is our responsibility to give students something to think about. Experiences designed to provide opportunities for critical reasoning do not have to be limited to technical accounting issues.

Planned Themes

Over and above the technical aspects of accounting, what themes run throughout your course? That is, what life lessons continually emerge in discussions or lectures of various accounting topics? For example, I continually emphasize the importance of “knowing what you don’t know” to students. At first, they think I’m crazy. But after several weeks, many start to grasp the importance of recognizing what they don’t understand as the first step to gaining an understanding of an issue. Or perhaps it is simply raising the question of “just because it is legal does that make it right?” By its very nature accounting calls for the exercise of judgment that has a moral component.

Discussion of these themes should be included in planned lectures. It takes very little time to present such themes, often no more than a minute or two. In fact, a great deal of time should not be spent on such themes. The impact is derived not from intensity of coverage, but rather from frequency of coverage. We need to be planting seeds and allowing them time to grow.

Unplanned Themes

Differing themes emerge as we get to know the personality of each class. They are all different and all have different needs. The tough part of the instructor’s job is to figure out what those differing needs are. Young instructors have the advantage of more easily relating to the younger students. They are closer to the experiences and frustrations of their students, with great potential to be relevant. Older instructors, of which I am one, lack that advantage, but can compensate because of classroom and life experience.

Our goal as teachers must be broader than teaching accounting. Sensing frustration and a lack of passion on the part of my students one day, I departed from the planned lecture to question why they were in the class and to talk about passion for learning. That led to what I might describe as an impassioned plea for students to follow their hearts and dreams in the choice of majors, emphasizing that the choice should not be one based on money, prestige, or the desires of others. Although unplanned, this sermon was intentional. I went back to this theme many times throughout the remainder of the semester. Several months later I received an email from a student telling me of his new life direction as a result of my message. Now whether this message ultimately has a positive or negative effect on his life I will probably never know. But there was an effect.

A Caveat of Unintended Consequences

The caveat about the little things relates to the law of unintended consequences. In reiterating these “little things” themes, care must be exercised to ensure that students correctly interpret what we have said or done. Repetition is important. More likely than not, students won’t pick up the full message the first time they hear it or see it. To avoid misunderstanding, define three or four “little thing” themes to run throughout your

course. But be adaptable. As you sense unexpected needs, adopt new themes. At the same time, respect the power of the spontaneous comment to influence students.

CONCLUSION

Now what are these little things? The answer is that it depends. It depends on you, the instructor in this first course. And it depends on your sense of the needs of your students. Will it be lessons in ethics, professionalism, attitude, life's challenges, or simply the best place to buy a good pizza? It can be all of these or none of these. The little things that we have to convey are the result of our own experiences and perspective. The little things are exhibited in what we say and what we do and in how we say and do things.

Just as children observe parents and often learn more from the behavior modeled by parents than from what they preach, students do sometimes listen and even observe our behavior and attitudes. Whether we like it or not, someone is listening and watching. What have they heard lately? What have they seen? Remember, it's the little things.

A SIMPLIFICATION AND VISUALIZATION OF TEACHING THE DIRECT METHOD FOR COMPUTING CASH FROM OPERATIONS

June 30, 2010

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A SIMPLIFICATION AND VISUALIZATION OF TEACHING THE DIRECT METHOD FOR COMPUTING CASH FROM OPERATIONS

Introduction

The Financial Accounting Standards Board (FASB), in cooperation with the International Accounting Standards Board (IASB), has issued a discussion paper “Preliminary Views on Financial Statement Presentation” proposing a new format for financial statements October 2008. Based on this proposal, there will be major changes for the presentation of all three of the major statements: Statement of Net Income (SNI), Statement of Financial Position (SFP), and the Statement of Cash Flow (SCF).¹ The proposed SCF follows the current format of SFAS No. 95 in presenting cash flows in three sections: operating, investing, and financing. However, there is one major change that will affect the teaching of the SCF in accounting, and that is the requirement for presenting the direct method of presenting cash from operations. The authors will present an alternative version of teaching the direct method for the Cash Flow Statement that will hopefully enhance the understanding of students.

Even though the proposed discussion paper will require a reconciliation of cash flows to comprehensive income in the notes (Action, 2009), requiring the direct method will have implications in education. Currently, the direct method is rarely used in practice even though the Chartered Financial Analyst (CFA) Institute, IASB, and the FASB have recommended the direct method. Studies by Orpurt and Zang, 2009; Cheng and Hollie, 2008; and Krishnan and Largay, 2000, have found that the direct method is useful in providing information to users of financial reports. Other authors (Wampler, Smolinski, and Vine, 2009; Drtina and Largay, 1985; Broome, 2004) have recommended it as the preferred method. A survey of practicing CPAs (Shough, 2009) found the majority of CPAs thought the direct method provided information more useful in decision-making, and more consistent with proposed cohesiveness and disaggregation of objectives.

Practitioners predominantly prepare the SCF using the indirect method because of the ease of preparation. SFAS No. 95 also requires additional work of including reconciliation when presenting the direct method in the preparation of the SCF. Thus, when utilizing the direct method, an organization is actually using both methods. Despite the recommendations of the professional organizations and the academic literature, however, many of the accounting texts and accounting professors give the direct method a secondary status.

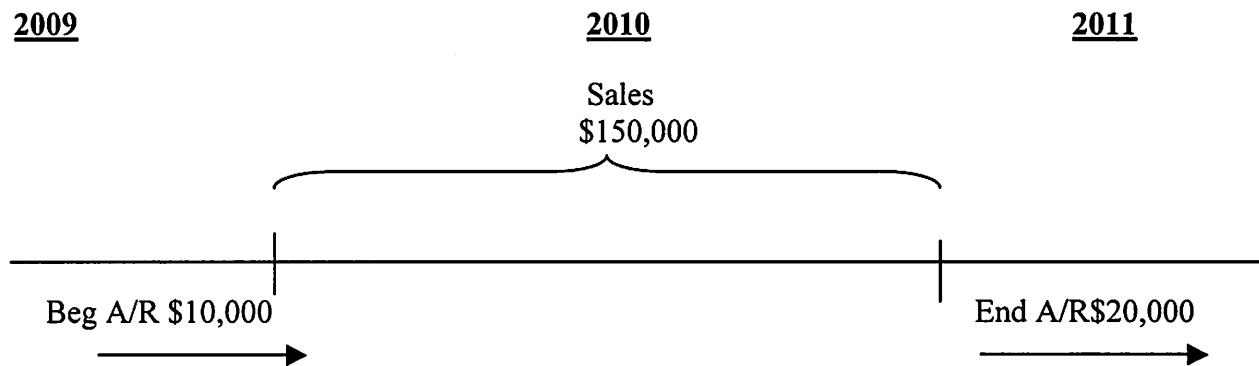
With the proposed discussion paper recommending the direct method to become mandatory, though, many universities will be shifting their emphasis from teaching the indirect method to teaching the direct method, starting with the basic accounting courses. The CPA exam most likely will be emphasizing this method also. Thus, faculty will need to find a way to convey the preparation and teaching of the direct method that is simple and easy to teach. The purpose of this paper is to provide an alternative method for teaching cash from operations, utilizing visualization techniques to help students understand and prepare cash flow statements using the direct method.

Teaching the Direct Method

The direct method presents cash from operations in two simple categories which even non-accountants can understand: cash inflows and cash outflows. Most people other than accountants do not understand the reconciliations from net income to CFO. The direct method is also more similar to the Statement of Net Income (SNI), in which items on the statement are either direct increases or decreases to net income.

Cash paid or received can be segmented in various categories. The majority of cash inflows results from cash received from customers. Other cash flows received can result from cash received from investments and dividends. Usually, the first category of cash paid is cash paid to suppliers. Other categories include cash for interest, cash paid for income taxes, and cash paid for other expenses. Each of these categories usually involves stock items from the balance sheet and at least one flow item from the income statement. The arithmetic of calculating each of these categories using the direct method will always involve starting with a flow item from the statement of net income (SNI) and adding and subtracting stock items from the statement of financial position (SFP).

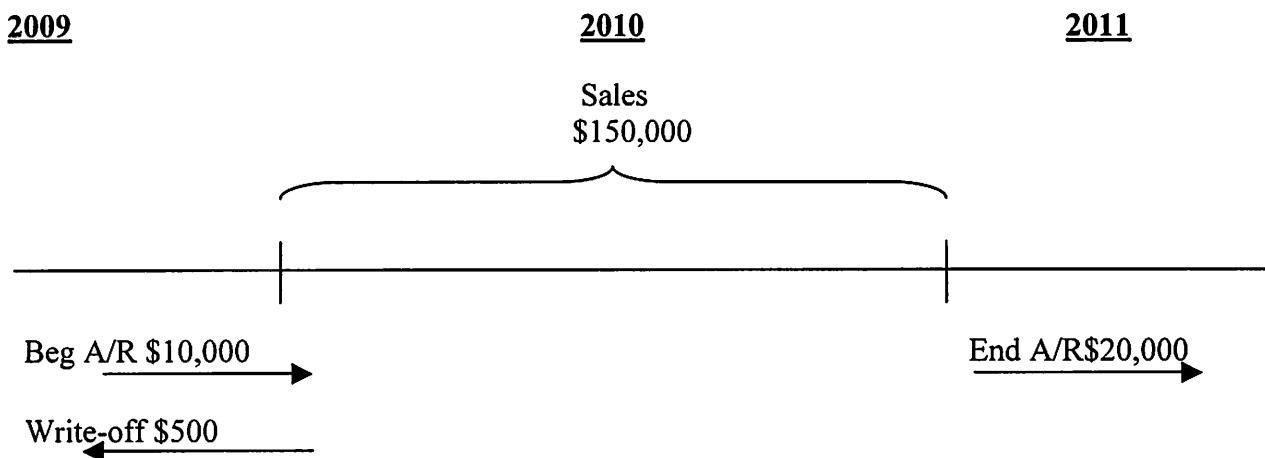
To simplify and visualize the direct method, one must diagram a picture in which students can see when cash is received and paid, and how we adjust from the accrual to cash basis. For example, cash received from customers will consist of two components: income from the SNI and beginning and ending accounts receivable as SFP items from the SNI. We will be utilizing data from the financial statement presented in Exhibit A. Sales during the year 2010 were \$100,000, and beginning account receivable and ending accounts receivable were \$10,000 and \$20,000 respectively.



Once diagrammed, it becomes more obvious that cash received from customers will equal \$140,000 for the year 2010. This includes \$10,000 of cash collected from the beginning A/R plus the sales of \$150,000, which occur during the whole period, minus the ending A/R of \$20,000 that will not be collected until 2011. However, what is most important is to emphasize to the students *when* we are collecting the cash. The line going from beginning A/R to the part of the line that is 2010 indicates that we are collecting the beginning A/R during the year 2010. Conversely, the line under the ending A/R indicates that we are collecting them during the year 2011. The students must remember that we are only concerned with collections during the year 2010.

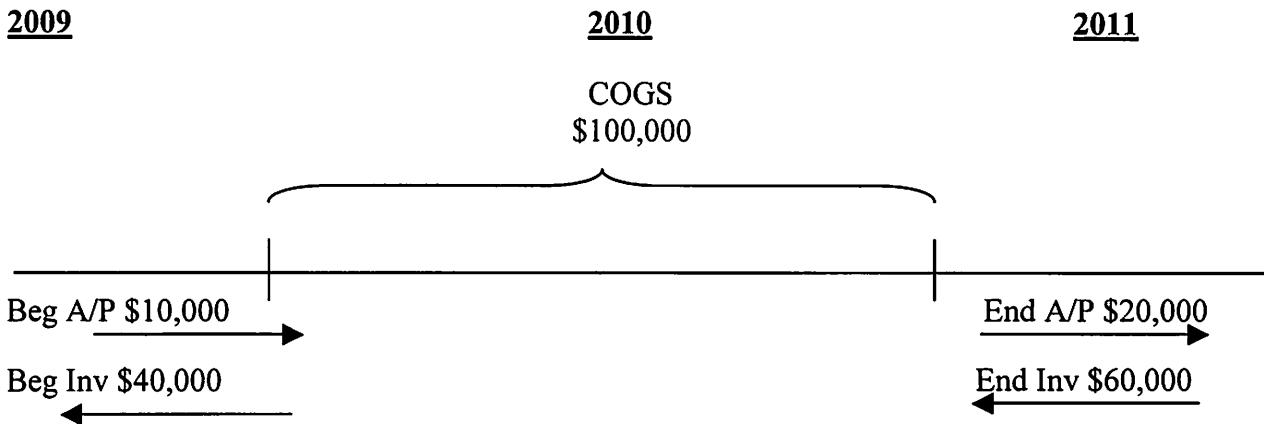
Sales	\$150,000
Plus Beg A/R	10,000 → paid collected 2010
Minus End A/R	-20,000 → will be collected 2011
Equals Cash Collected from Customers	\$140,000

We can now complicate the problem slightly by assuming there are write-offs and allowance for doubtful accounts. Using the same information, assume that there was beginning and ending allowance for doubtful accounts of \$1,000 and \$1,200 respectively. Also assume that \$500 of customers were written off during 2010 and a \$700 adjusting entry was made at the end of 2010 to adjust allowance for doubtful accounts to \$1,200. We can use the same diagram, assuming that instead of collecting \$10,000 of beginning A/R in 2010, we collected \$9,500 (\$10,000 minus the \$500 written off). Thus, the amount of cash collected from customers would be \$139,500 (\$9,500 + \$150,000 - \$20,000). Again, this can be explained by showing the amount of beginning A/R that is collected during the current year.



Sales	\$150,000
Plus Beg A/R	10,000 → paid collected 2010
Minus End A/R	-20,000 → will be collected 2011
Minus Write-off	-500
Equals Cash Collected from Customers	\$139,000

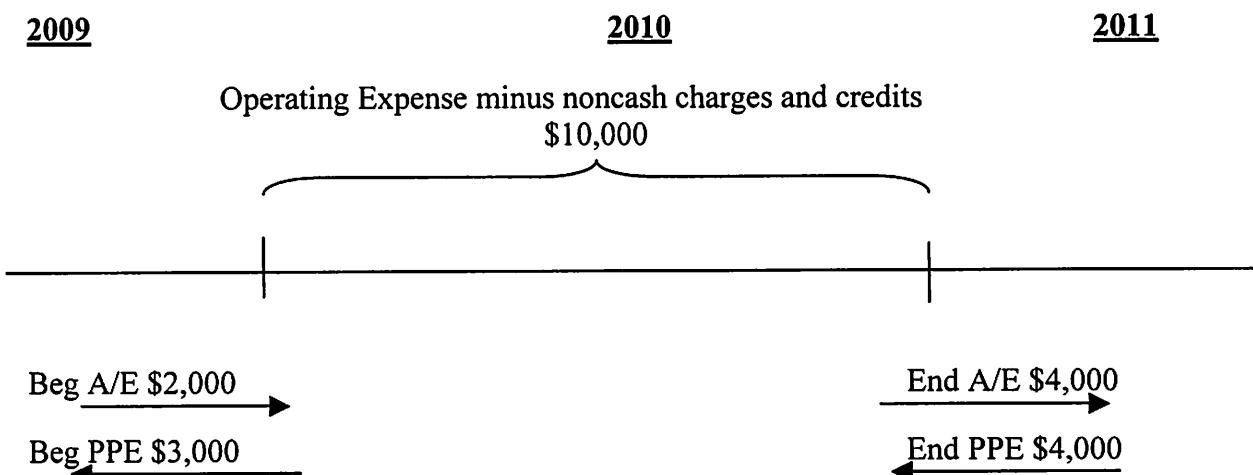
The next area considered is cash paid for merchandise. A diagram can be easily drawn to show the effect of the SFP and SNI accounts for cash paid for merchandise. Using the information from the statements in Exhibit A, the beginning accounts payable (A/P) and ending payable (A/P) are \$30,000 and \$20,000 respectively. Also, the beginning inventory and ending inventory are \$40,000 and \$60,000 respectively, and the cost of goods sold was \$100,000.



The calculations become more obvious by visualizing when accounts payable are going to be paid or when we paid for inventory. Beginning accounts payable would be paid during the current year (2010), and ending accounts payable would be paid the following year (2011). We can also assume that the beginning inventory was paid the past year (2009), and the ending inventory was paid the current year (2010), while the COGS sold is a flow item that occurs during the entire period.

COGS	\$100,000
Plus Beg A/P	10,000 → paid during 2010
Minus End A/P	-20,000 → will be paid 2011
Plus End Inv	60,000 → paid during 2010
Minus Beg Inv	<u>-40,000</u> → paid during 2009
Equals Cash Paid for Merchandise	\$110,000

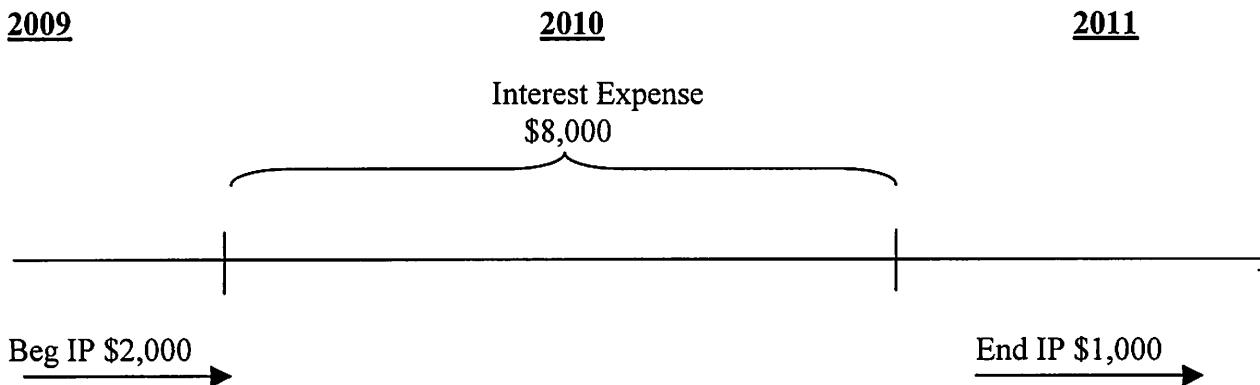
Cash paid for other expenses includes the same theory as discussed above. For example, let us assume that expenses from the income statement minus noncash charges and credits total \$10,000. Noncash charges and credits will include depreciation, amortization, gains, and losses. Assume beginning and ending prepaid expenses (PPE) are \$2,000 and \$1,000, and beginning and ending accrued expenses (AE) are \$2,000 and \$4,000 respectively.



Starting with operating expenses minus the noncash charges and credits of \$10,000, one would add the beginning accrued expenses that would be paid in 2010 of \$2,000 and subtract the ending accrued expenses that would be paid in 2011 of \$4,000. We can assume that beginning prepaid expenses of \$3,000 were paid in 2009 and the ending prepaid expense of \$4,000 was paid in 2010. The calculations are as follows:

Operating expenses minus noncash charges and credits	\$10,000
Plus Beginning A/E	2,000
Minus Ending A/E	-4,000
Plus Ending Prepaid Expenses	4,000
Minus Beginning Prepaid Expenses	<u>-3,000</u>
Cash paid for operating expenses	\$ 9,000

Cash paid for interest or taxes or any particular expense is even simpler. Interest expense for the year is \$8,000, and beginning and ending interest payable (IP) is \$2,000 and \$1,000 respectively.



One should follow the diagram and show students when we are paying the cash, noting that we are only interested in the year 2010. We start with \$8,000, add the beginning interest payable \$2,000 that is being paid this year (2010), and subtract the ending interest payable, \$1,000 that will be paid during the year 2011. The amount of cash paid for interest is \$9,000.

Interest expense	\$8,000
Plus Beginning Interest Payable	2,000
Minus Ending Interest Payable	<u>-1,000</u>
Cash Paid for Interest	\$9,000

The cash from operations using the direct method looks as follows:

Cash received from customers	\$140,000
Cash paid for merchandise	110,000
Cash paid for operating expenses	9,000
Cash paid for interest	<u>9,000</u>
Cash from operations	\$ 12,000

Conclusion

With the direct method of calculating CFO eventually becoming the required method of presentation for the SCFs, faculty must reconsider how this subject is taught. Since the indirect method was the preferred method for practitioners, it was the method generally emphasized in the accounting texts. However, using the direct method for the cash flow statement will result in better information for investors, creditors, managers, and other users of the Cash Flow Statement. The purpose of this paper was to assist faculty in teaching the direct method by presenting a simpler and more effective method than rote memorization. Using the established theory for calculating CFO but presenting the information in a visualization format, faculty should find the direct method easier to teach and, for students, easier to learn.

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Exhibit A
Partial Statement of Financial Position

	<u>December 31, 2010</u>	<u>December 31, 2009</u>
<u>Assets</u>		
Accounts Receivable	\$20,000	\$10,000
Inventory	60,000	40,000
Prepaid Expenses	4,000	3,000
<u>Liabilities</u>		
Accounts Payable	20,000	10,000
Interest Payable	1,000	2,000
Accrued Expenses	4,000	2,000

Statement of Net Income

Sales	\$150,000
Cost of Goods Sold	100,000
Operating Expenses	15,000
Interest Expense	<u>8,000</u>
Net Income	27,000

¹ Benzacar (2009) and McClain and McLelland (2008) present excellent summaries of proposed changes in the financials.