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Trends

Teaching Judgment in Beginning Accounting[1]

Belverd E. Needles, Jr., Ph.D., CPA

Beginning accounting focuses mostly on definitions, procedures, and calculations:

- What is an asset and how does it differ from an expense?
- How do you record the purchase of an asset or an expense?
- How do you calculate the amount of an expense or how much of an asset that has been expired?
- How much are total assets or expenses?

There are straight-forward answers to these questions, but it is important to encourage students, most of whom will have only one or two accounting courses in their academic careers, to consider the judgments that underline accounting and financial reporting. Consider the following business decisions by a company seeking to obtain equipment for its business:

- It can purchase equipment by taking out a bank loan
- It can purchase equipment by issuing stock
- It can lease the equipment

Also, consider the following financial reporting decisions:

- The company estimates the useful life of the equipment to be five years.
- The company estimates the residual value of the equipment to be 10 percent of cost.
- The company uses the straight-line method to estimate depreciation.
- The company records the lease payment as an operating lease.

In this more extended *Trends*, I show how realistic judgment examples can be introduced into your class using concepts and techniques that students will understand and benefit from at this level.

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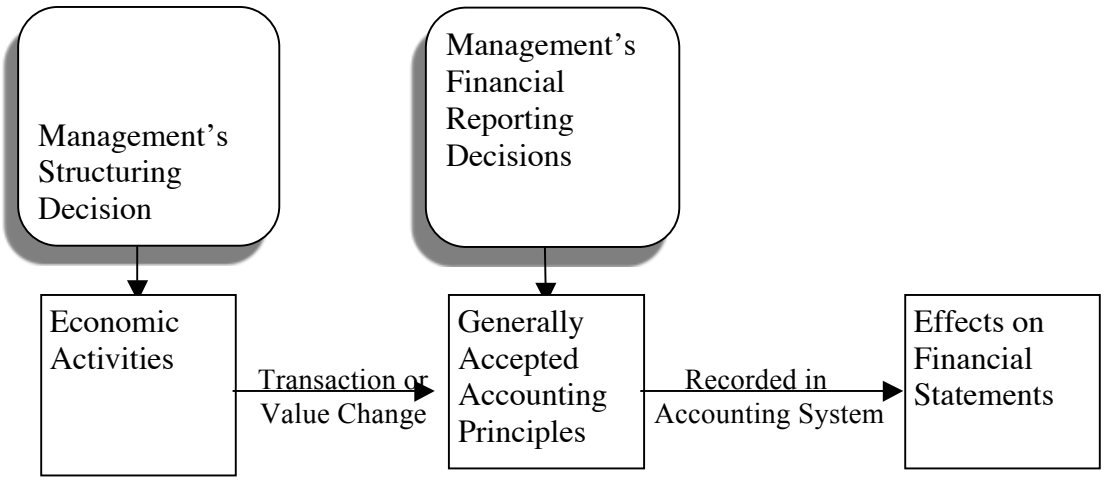
[1] This *Trends* is based on a longer study made by the author during his year (2010-2011) as the Wicklander Fellow in Business Ethics at DePaul University.

Business-structuring versus financial-reporting decisions. As may be seen in Figure 1, every item in the financial statements is the result of the complex interaction of these two decisions by management:

- A business structuring decision and
- A financial reporting decision

Figure 1: Business-Structuring Decisions versus Financial-Reporting Decisions. [2]



Financial statements are affected first by business structuring decisions that engage the business in economic activities. These decisions result in transactions or changes in value that must then be recorded in accordance with generally accepted accounting principles (GAAP). Financial statements are affected second by financial reporting decisions because GAAP offers both alternative financial reporting treatments and relies on judgment. Various accounting decisions must be made to record the transactions in the accounting system from which the financial statements and related disclosures are prepared.

Management can structure its decisions to such a way as to determine subsequent GAAP treatment by, for example, how they

- Time transactions to result in favorable timing of revenue or expense recognition
- Write contracts, such as lease agreements and pension agreements.

[2] McKee, T.E. (2005). Earnings Management: An Executive Perspective, 1st Edition.

GAAP requires managers to make numerous financial reporting judgments that have an impact on reported earnings. Examples of these financial reporting judgments that could subtly shade earnings in one direction or another include:

- Long-term construction contracts require estimates of progress toward completion and costs to complete. Managers could use optimistic estimates of progress toward completion to inflate earnings.
- Accounts receivable must be stated at net realizable value. Managers could use optimistic estimates of collectability to overstate earnings.
- Costs must be classified as product costs or period costs. By classifying some borderline costs as product rather than period costs, managers can reduce expenses during times of inventory growth.
- Gains on asset dispositions may be fully recognized in the period of sale. Managers could time the sale of appreciated assets such as marketable securities and fixed assets to bolster earnings.
- Software development companies must estimate the point at which technological feasibility is reached for software products and capitalize software development costs after that point. Managers could accelerate this date to avoid immediately expensing some software development costs.
- Anticipated costs of satisfying warranty obligations must be accrued and matched to revenues. By making optimistic estimates of product warranty costs, managers could reduce current expenses.
- Ordinary repairs are expensed as incurred, while major repairs are capitalized. By treating ordinary repairs as major repairs, managers could bolster current earnings.
- Inventories must be stated at the lower of cost or market. Managers could use optimistic market values, resulting in reduced inventory write-downs. [3]

[3] Jackson, S.B., and Pitman, M.K. (2001, July). "Auditors and Earnings Management," *The CPA Journal.* <http://www.nysscpa.org/cpajournal/2001/0700/features/f073801.htm>

In a study of 347 cases of fraudulent financial reporting over the last decade, the Committee of Sponsoring Organizations (COSO) identified numerous motivations for falsifying the financial reports, including to:

- Meet external earnings expectations of analysts and others
- Meet internally set financial targets or make the company look better
- Conceal the company's deteriorating financial condition
- Increase the stock price
- Bolster financial position for pending equity or debt financing
- Increase management compensation through achievement of bonus targets and through enhanced stock appreciation
- Cover up assets misappropriated for person gain[4]

Overly aggressive earnings management is a form of fraud and differs from reporting error. Management wishing to show earnings at a certain level or following a certain pattern seek loopholes in financial reporting standards that allow them to adjust the numbers as far as is practicable to achieve their desired aim or to satisfy projections by financial analysts. These adjustments amount to fraudulent financial reporting when they fall 'outside the bounds of acceptable accounting practice'. The special COSO report also identified the most common financial fraud techniques among the 347 fraud companies to include:*

- Improper revenue recognition (recording fictitious revenues or recording revenues prematurely) 61%
- Overstatement of assets (excluding accounts receivable) 51%
- Understatement of expenses/liabilities 14%
- Insider trading also sited 24%
- Disguised use of related party transactions 18%
- Other miscellaneous techniques (acquisition, joint ventures, etc) 20%[5]

[4] Beasley, M.S., Carcello, J.V., Hermanson, D.R., & Neal, T.L. (2010, May). *Fraudulent Financial reporting 1998-2007: An Analysis of U.S. Public Companies.* Committee of Sponsoring Organizations of the Treadway Commission (COSO), 14.

[5] Ibid., p. 17.

* Totals more than 100% because of multiple abuses

Judgment, estimates, and accounting choices. Accounting choices, both structural and judgmental, should be made within the framework of GAAP. Most people understand that GAAP are the set of rules, practices, and conventions that describe what is acceptable financial reporting for external stakeholders, but they may find it surprising that a single, normal, everyday accounting choice may be either ethical or unethical. The difference between an ethical and an unethical accounting choice is often merely the degree to which the choice is carried out. The problem with many accounting judgments is that there is no clear limit beyond which a choice is obviously unethical. Thus, a perfect routine accounting decision, such as expense estimation, may be illegal if the estimated amount is extreme but perfectly ethical if it is reasonable. GAAP does not tell managers what specifically is normal and what is extreme. It is more like a speed limit sign that just says "Don't Drive Too Fast!"

An example for your class. Uncollectible accounts estimation is a prime example of an accounting decision many managers have to make. Since a company extends credit as an incentive for customers to buy, estimated losses from those who do not pay are considered a cost of the current period even though it will not be known until future periods, which customers will not pay, and what the amount of non-payment will be. GAAP requires that an estimate of uncollectible accounts be recorded as an expense in the same fiscal year as the revenue from the product is recorded. This follows a basic accrual accounting concept of matching expenses with related revenue.

Even small changes in estimates can have important effects on reported earnings. To illustrate, assume that a company has operating income of $100,000 before the estimate of uncollectible accounts. Also, assume management estimates uncollectible accounts to be $6,000 or 2 percent of net sales of $300,000. The income statement would look like this:

Revenue	$100,000
Less: Estimated Uncollectible accounts expense	6,000
Net	$ 94,000

However, the fact that uncollectible accounts will be $6,000 is not always so clear.

Assume that for the past five years, average uncollectible accounts costs on the same level of sales have ranged from $4,000 to $8,000 (1.33% to 3.67% of net sales), with no specific pattern being apparent.

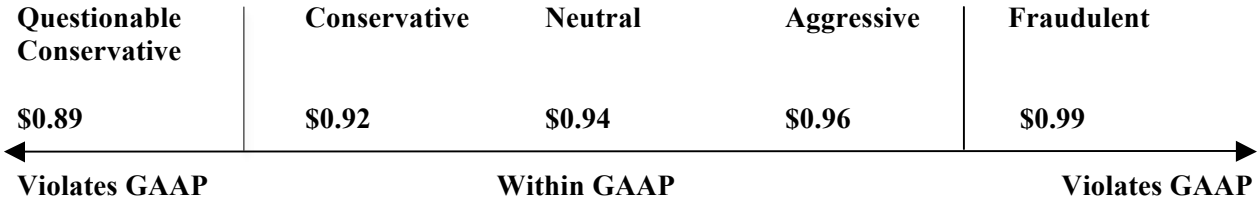
- A financial manager who wanted to report the highest possible current period income would be justified in using $4,000 amount for the current year's expense estimate even though $4,000 is the bottom of the historical range.
- That same manager might use $8,000 to be conservative in a year when the economy is weak.
- That same manager might even be justified in using $3,000 if there was evidence that improved customer credit investigation and improved economy during the current fiscal year would be expected to lower future losses from uncollectible accounts.
- But what if that manager used an estimate of $1,000 simply because that figure would make it possible to achieve a desired net income target for the fiscal year? Since the $1,000 has no reasonable support, using it would be crossing the ethical line to possible financial fraud even though GAAP does not draw the clear line ethical use of judgment and unethical use.
- Or, on the other end of the spectrum, management might choose the highly conservative estimate of $11,000 because the company for whatever reason (perhaps to avoid taxes or to appear unattractive to a take over) did not want to show higher income. Since the $1,000 or $11,000 have no reasonable support, using it would be crossing the ethical line to possible financial fraud even though GAAP does not draw the clear line ethical use of judgment and unethical use.

As may be seen in Figure 2, the concept of a reporting earnings continuum from questionable conservative to conservative to neutral to aggressive to fraudulent. The question becomes as to where to draw the lines. Should they be wide latitude as in Figure 2a or more narrow as in Figure 2b? The answer does make a difference. In this one example of a rather modest difference in estimate from $1,000 to $11,000 (.33% to 3.67% of net sales), it make a difference of $.10 per share ($.99-$.89) or approximately

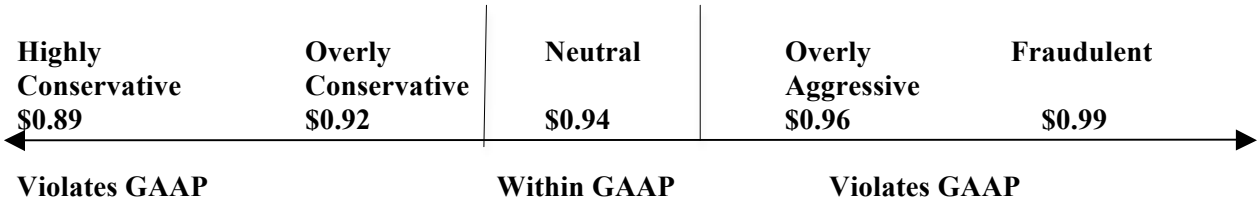
10 percent of earnings per share (EPS). Given that EPS is the most commonly quoted performance measure for companies and that when companies miss analysts' earnings estimates by $.01, 75 percent of the time it is by more than the estimate. Finally, consider that the estimate of uncollectible accounts is only one of dozens of estimates made by management in preparing the financial statements.

Figure 2: Where Do You Draw the Line?

2a: The Earnings Management Continuum of Ethical Financial Reporting [6]



2b: Overly Aggressive Earnings on the Continuum [7]



It is clear from Figure 2, there is no "bright line" in GAAP to tell managers what is and what is not acceptable. It is also clear that while this illustration shows the magnified effect of just one judgment, we have seen earlier that management is presented with numerous structural and estimate decisions that can impact reported earnings. Management is simply expected to make choices that appropriately reflect a company's economic performance. What is appropriate for one company may not be appropriate for another. Here are some example cases that range from highly conservative to fraudulent.

Case example—Highly Conservative: Following the anti-trust investigation by the U.S. attorney general, Microsoft failed to recognize revenue as earned. This is perhaps

[6] Adapted from Dechow, P.M. Skinner, D.J. (2000). "Earnings management: reconciling the views of accounting academics, practitioners, and regulators," *Accounting Horizons* 14 (2): 239.

[7] Ibid.

an example of unacceptable highly conservative earnings management shows that not all earnings management practices involve overstatements. The SEC alleged that Microsoft's accounting practices from July 1994 through June 1998 caused its income to be substantially misstated. Microsoft failed to accurately report its financial results, causing overstatements of income in some quarters and understatements of income during other quarters. SEC said Microsoft enhanced its financial results by setting aside artificially large reserves to reduce revenues, with the idea of reversing that procedure to record the revenues in less profitable times. The reserves totaled between $200 million and $900 million during the period in question. The SEC criticized the use of such so-called "cookie-jar" reserves, which can give investors an inaccurate picture of the company's current financial performance. Under a settlement with the Securities and Exchange Commission, Microsoft has agreed to refrain from accounting violations to settle federal regulators' allegations that it misrepresented its financial performance. Under the settlement, Microsoft neither admitted to nor denied wrongdoing and no fine was imposed. [8]

Case example—Conservative to Neutral: Based on management's analysis of sales returns and allowances and uncollectible accounts, Time Warner established reserves of $2,253 billion and $2,229 billion at December 31, 2009 and 2008, respectively, These estimates represent about 30 percent of gross accounts receivable in both years. Management explains that this is an "area of judgment affecting reported revenues and net income" and is based on analysis of "vendor sell-off of product, historical return trends, current economic conditions, and changes in customer demand."[9] This is perhaps an example of conservative to neutral earnings management.

Case example—Neutral to Aggressive: Following the 9/11 crisis, Southwest Air changed the estimated lives of its airplanes from 22 years to 27 years under the reasoning that improved maintenance methods enabled them to get more useful years use out of the aircraft. This change in accounting estimate, which does not require a consistency

[8] "Microsoft Settles Accounting Charges with SEC*, USA Today,* June 3, 2002.

[9] Time Warner Inc. (2010). *Annual Report,* 2009.

disclosure in the auditor's report, had the effect of enabling Southwest to continue to show year-to-year earnings growth. The change of estimate and its effect were disclosed in a note to the financial statements. This is perhaps an example of acceptable neutral to aggressive (not overly aggressive) earnings management.[10]

Case Example—Acceptable Aggressive: Some companies, including AT&T Inc. and Verizon Communications Inc., are changing their accounting for pension plans in 2010 by shifting to mark-to-market accounting. In the market meltdown from the financial crisis in 2008-2009, these companies incurred very large losses: $23 billion for AT&T and $12 billion for Verizon. Rather than recognize these losses on their income statements in 2008-2009 the companies elected in accordance with current U.S. standards to amortize them over future years.[11] Now, in the 2010 financial statements, these companies are electing to change their accounting for pension funds to mark-to-market accounting in line with international standards and to restate prior years financial statements. The effect of this change is that the large losses in 2008-2009 will never be reflected in the current year's financial statements and 2010 earnings will be much better than they would have been. The companies justify the change as making the financials more transparent for investors in the current and future years by reflecting changes in the market value of pension assets and obligations. An AT&T spokesman says it improves accounting clarity so "everyone can understand where the gains and losses that get recognized in our income statement at the end of each year are tied to real economic events." And a Verizon spokesman says the new approach "actually is a preferable accounting method and one that aligns with the fair value accounting concepts and current [IASB] proposal."[12] This is perhaps an example of acceptable aggressive earnings management

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[10] Southwest Airlines, Inc. (2003). *Annual Report,* 200*2.*

[11] Michael Rapoport. (2011, March 9). "Rewriting Pension History," *The Wall Street Journal*.

[12] Barry B. Burr. (2011, February 21). "Mark-to-Market Accounting Helps Companies Shift Pension Plan Losses," *Pensions and Investments*.

Case Example—Overly Aggressive: The S.E.C. accused Dell of misleading investors by using money the company received from the chip maker Intel to pad its quarterly earnings statements. Company executives, according to the S.E.C., relied on the payments from Intel to meet or surpass Wall Street's expectations. Intel paid Dell in the form of rebates as part of an agreement to ensure that Dell would not use computer chips made by Advanced Micro Devices (AMD) in its personal computers and computer servers, according to the civil charges. Those rebates are the subject of federal and state antitrust inquiries of Intel. When Dell eventually picked AMD as a second supplier, Intel cut the rebates, and Dell's financial performance suffered, the complaint said. The S.E.C. said in its charges that investors were not aware of the extent of period to project financial results that the company wished it had achieved but could not," said Christopher Conte, associate director of the SEC's enforcement division, in a statement announcing the settlement. "Dell was only able to meet Wall Street targets consistently during this period by breaking the rules." Without the Intel payments, Dell would have missed the consensus estimate for earnings per share published by Wall Street analysts who followed the company in every quarter during its fiscal years from 2002 through 2006. The exclusivity payments constituted a steadily growing part of what Dell reported as its operating earnings, from 10 percent in fiscal 2003 to 38 percent in the fiscal 2006, then jumping to 76 percent in the first quarter of fiscal 2007, the S.E.C. said. In settlement, Dell, several former executives, and its founder, Michael S. Dell, agreed to pay more than $100 million in penalties to settle charges of disclosure accounting fraud filed by the Securities and Exchange Commission.[13]

Case example--Fraudulent: **Satyam Computer Services,** which was once ranked among the top three IT firms in India, boasted in early 2008 that the company had mastered U.S. GAAP accounting, "We can say with confidence that we carry out U.S. GAAP accounting as perfectly as any other global corporation. . . We have to comply

[13] Wyatt. E. (2010, July). "Dell to Pay $100 Million Settlement," *The New York Times.* < http://www.nytimes.com/2010/07/23/business/23dell.html>

with SOX [Sarbannes-Oxley] requirements well ahead of time."[14] On the morning of Jan. 7, 2009, Ramalingam Raju, the chairman of troubled Indian IT outsourcing company Satyam Computer Services, sent a startling letter to his board and the Securities & Exchange Board of India. Raju acknowledged his culpability in hiding news that he had inflated the amount of cash on the balance sheet of India's fourth-largest IT company by nearly $1 billion, incurred a liability of $253 million on funds arranged by him personally, and overstated Satyam's September 2008 quarterly revenues by 76% and profits by 97%. After submitting his resignation, Raju ended his letter by apologizing for his inability to close what began as a "marginal gap between operating profits and the one reflected in the books of accounts" but grew unmanageable.[15] Satyam was charged with fraud and was later bought by Mahindra & Mahindra Inc. Satyam has come to be known as the "Enron of India." This is a case that clearly deceptive accounting: unethical and fraudulent.

Summary. Thus, using case examples of well-known companies, we can introduce students to the judgments and estimates, both of a business nature and a financial reporting nature that underline financial statements and are important considerations if they are to become knowledgeable business people.

[14] Reason, T. (2009, January). "Pro-Forma Distraction at Satyam," *CFO.com.* <http://www.cfo.com/article.cfm/12964444/c_13047759?f=insidecfoeurope>

[15] Kripalani, M. (2009, January). "India's Madoff? Satyam Scandal Rocks Outsourcing Industry," *businessweek.com.* <http://www.businessweek.com/globalbiz/content/jan2009/gb2009017_807784.htm>

OPTIMIZING COURSE MANAGEMENT SYSTEM RESOURCES IN THE INTRODUCTORY ACCOUNTING COURSE

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ABSTRACT

Course Management Systems (CMS) such as Moodle, D2L, WebCT, and Blackboard are frequently used by faculty as auxiliary resources for introductory accounting courses. Instructors often develop creative CMS resources to make a positive pedagogical impact in achieving learning goals for their students. This study examines the effectiveness of CMS resources in the introductory accounting course. During three introductory financial accounting courses taught during the 2009-2010 and 2010-2011 academic years, CMS videos, problem solutions, notes, slides, and other CMS resources were optional learning tools made available to students during the study. Analyses were performed to determine whether student CMS use correlated with student performance. Pre- and post- course exam were administered to assess how CMS use impacted student learning. In addition, a student survey was conducted to gather evidence to determine what resources were considered most useful by students, and to compare student perceptions of usefulness with actual use. Results of the study found that use of CMS resources do not appear to impact the course grade achieved by students in the introductory accounting course. The implication is that student entry-level skills are more influential in predicting course grade than other factors, including the degree of CMS use. In contrast, CMS use appears to impact students' increased knowledge of the course material as shown by the comparison of post-exam to pre-exam scores. Of all the resources available, student use of videos showed the most significant relationship to improvement in the pre- to post-exam scores. By evaluating student CMS resource use and sharing best practices, faculty can continue to improve the learning experience for beginning accounting students.

INTRODUCTION AND BACKGROUND

The introductory accounting course is the critical first step towards capturing students' interest in accounting. Actively engaging students during their initial foray into the world of accounting is essential. Toward this end, faculty use technology as another pedagogical resource to reach students on a learning platform to which students have become accustomed. Technology, including video technology, has always been an integral part of this generation of students' personal and academic lives. Indeed, many instructors anecdotally note that students expect and appreciate the use of technology in their courses.

Course Management Systems (CMS), also known as Learning Management Systems, such as Moodle, D2L, WebCT, and Blackboard, are often used as auxiliary resources for introductory accounting courses. As stated in a recent EDUCAUSE article, "Learning management systems (LMSs) have dominated the teaching and learning landscape in higher education for the past decade, with a recent Delta Initiative report indicating that more than 90 percent of colleges and universities have a standardized, institutional LMS," (Mott, p. 1, 2010). As instructors, we develop creative CMS resources with the goal of positive pedagogical impact and improved student learning. However, the research discussing the effectiveness of CMS remains relatively thin. "The rapid penetration of learning management systems as key tools for learning occurs in a vacuum of solid research as to their effectiveness in increasing learning—or even indication of best practices for technology implementation" (Siemans, p. 2, 2006).

CMS resources may include video technology as well as written postings. Instructors assume that such resources result in increased student learning, yet how is the effectiveness of these resources assessed? How often are students using the CMS? Which resources are found most useful by students? How can instructors maximize the pedagogical value of CMS? The following study is directed towards answering these questions with regard to the beginning accounting course.

During three introductory financial accounting courses conducted in the academic years (AY) of 2009-2010 and 2010-2011, Camtasia videos, solutions, notes, slides, and other CMS resources were available to students. Analyses were performed to determine whether CMS use related with student performance. Pre- and post-course exams were administered to assess student learning, relative to CMS use. In addition, a student survey was conducted to gather evidence about which resources were deemed most useful by students and to compare student perceptions of usefulness with actual use.

COURSE MANAGEMENT SYSTEM RESOURCES

The CMS used in this study was Moodle; Appendix 1 illustrates an example screenshot of the CMS Moodle resources available to the introductory accounting students. The CMS resources included:

- Syllabi, announcements, and other administrative detail
- Written homework solutions
- Camtasia video homework solutions
- Camtasia video practice exercises
- Microsoft PowerPoint slides
- Microsoft Excel templates
- Homework check figures
- Chapter worksheets and outlines

What are Camtasia Videos?

Written homework solutions and Camtasia video homework solutions were posted to the CMS after homework assignments were reviewed and discussed in class. Camtasia videos capture the instructor's computer screen and voice; it is as if a video camera sits on the instructor's shoulder while showing computations or discussing concepts (www.techsmith.com/camtasia/). By using a tablet computer, the videos made available to students also included drawing/pen tools. For example, one may envision videos produced by the Khan Academy (www.khanacademy.org/).

ASSESSMENT and LIMITATIONS

The research was performed at a private liberal arts residential undergraduate institution. Data were collected during the fall of 2009 and 2010 for the beginning accounting course. The samples sizes were 27 students and 52 students for the AY 2009-2010 and AY 2010-2011 studies, respectively.

Survey

A survey was administered during the last week of class. The survey collected both quantitative and qualitative data about students' self-reported use of specific Moodle resources (see Appendix 2).

Frequency of Moodle Use

Using the "Report" (http://docs.moodle.org/20/en/course/report) feature of Moodle, the frequencies of student access to the above resources were monitored. Students were unaware their activities on the Moodle site were being actively monitored. Frequencies of Moodle hits were analyzed. However, differentiation due to the length of Moodle visits was not recorded. Individual uses of specific resources were identified, as well as total student hits to a particular resource. Frequency of use was then compared to course performance as measured by course grade and the results of a pre/post-exam.

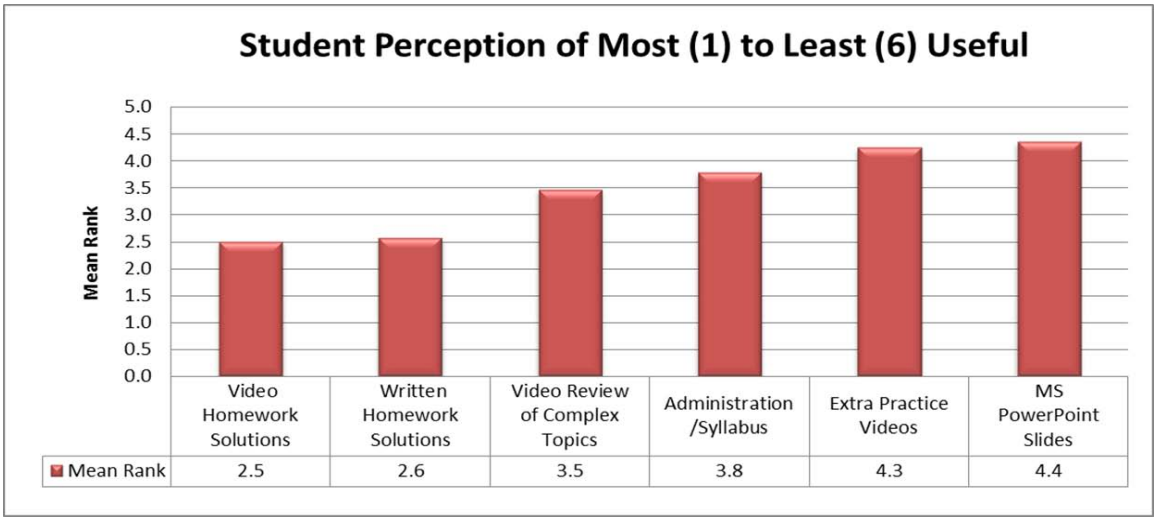
Pre/Post Exam

To further assess the correlation between CMS use and course performance, a pre/post-exam was added to the AY 2010-2011 study. A pre-exam was administered to students within the first two weeks of the course and the identical exam was administered as a post-exam during the last week of the course. The exam was composed of 20 multiple-choice questions selected from the textbook test bank to reflect the breadth of content covered during the semester.

RESULTS

Quantitative Survey Results (AY2010-2011)

As shown in the figure below, students ranked video homework solutions and written homework solutions as the most useful CMS resources. Sixty to sixty-seven percent of students agreed or strongly agreed that written homework solutions and videos, available via the Moodle site, improved their understanding of concepts.



Instructors use indirect assessment tools such as course evaluations and surveys to serve as guidance in developing optimally useful resources for beginning accounting students. Reliance on student self-assessment seems reasonable; however, comparing self-reported Moodle use with actual use adds validity. The results below indicate that students were accurate in their self-estimate of Moodle use per the survey. The self-estimate of videos viewed was comparatively low; however, students may have watched the same video more than once. Students also appeared accurate in stating the non-predictive value of total Moodle site use and video use in regard to course grade; this is discussed further in the next section.

	Actual Moodle Hits for All Resources	**Self-Estimate of Moodle Hits for All Resources**	**Actual Videos Viewed**	**Self-Estimate of Videos Viewed**
Mean	34.2	35.45	6.5	3.5
St. Dev.	41.2	44.59	10.8	4.3

Qualitative Survey Results (AY2010-2011)

Survey Question: "Indicate what you liked about the Moodle videos."
Typical Student Responses:
(1) "They were instructive, and it was just like an in-class activity. These really are worth doing. I enjoy seeing how a problem is done, then applying it to homework."
(2) "I like that you can go over them multiple times, and stop them and rewind if needed. They help clarify and show how to exactly do a problem."

Survey Question: "Indicate suggestions for improvements to any aspect of the course Moodle site."
Typical Student Responses:
(1) "I would like to see practice for conceptual problems, not just journal entries and those types of problems."
(2) "More practice problems similar to those from homework assignments."

Moodle Frequencies (AY2010-2011)

The table below shows actual Moodle hits per student for each category of Moodle resources.

	Total Moodle Hits for all Resources	Total Hits for Written Solutions (homework and worksheets)	Total Hits for Video Solutions and Check Figures	Total Hits for PowerPoint Slides	Total Hits for Written Check Figures and Templates	Total Hits for Written Chapter Objectives	Total Hits for Written Chapter Outlines and Other Handouts	Other Moodle Hits, e.g. Syllabus
% of Total Hits	100%	35%	19%	13%	10%	7%	7%	9%
Mean # of Hits	34.2	12.1	6.5	4.5	3.4	2.4	2.4	

Pre/Post-Exam Results

The AY 2009-2010 results indicated a slightly negative relationship (not statistically significant, p=.32) between Moodle use and course grade. Students' course grades and their self-estimates of weekly Moodle site hits were negatively correlated (p<.10). The AY 2009-2010 results implied that students who experienced more challenge with the course (as reflected in their course grade) perceived their use of Moodle to be more frequent as compared to the perception of students who received higher course grades. The results of the 2009 study were counterintuitive. One could also argue that course grade does not necessarily reflect the student level of learning during the introductory accounting course. To further investigate this relationship, the AY 2010-2011 study included the pre/post-exam described in the "Assessment and Limitations" section, above. Student achievement was assessed by comparing relative post-exam results with Moodle use.

A multiple linear regression was performed using the post/pre-exam ratio ((post-exam score – pre-exam score)/pre-exam score) as the dependent variable, and various Moodle resources as the independent variables. One data point is deleted as an outlier. The outlier indicates 265 total Moodle hits by one student. Without the outlier, the range of Moodle hits is 0 – 85. The results are shown in the table below.

Variable	Estimate	Std. Err.	T stat	P-value
Intercept	0.4126	0.1218	3.3875	0.0016
Moodle Hits for Written Solutions (homework and worksheets)	-0.0141	0.0075	-1.8843	0.0668
Moodle Hits for Video Solutions and Check Figures	0.0469	0.0112	4.1884	0.0002
Moodle Hits for Written Chapter Objectives	0.1163	0.0589	1.9732	0.0554
Moodle Hits for PowerPoints	-0.0207	0.0162	-1.2763	0.2092
Moodle Hits for Written Check Figures and Templates	-0.0318	0.0268	-1.1877	0.2419
Moodle Hits for Written Chapter Outlines and Other Handouts	-0.0265	0.0366	-0.7242	0.4731

Analysis of variance table for multiple regression model:

Source	DF	SS	MS	F-stat	P-value
Model	6	5.963421	0.99390346	4.149324	0.0025
Error	40	9.581353	0.23953384		
Total	46	15.544774			

R-squared: 0.3836

The model for various Moodle resources and Pre/Post Exam Ratio (p = .0025, R^2 = .38) shows a positive relationship between the use of videos and the Pre/Post Exam Ratio (p = .0002). Of all the Moodle resources categories, videos and written chapter objectives appear to have the most predictive value for student improvement between the pre-exam and post-exam.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE STUDY

Student use (n = 52) of the CMS resources in an introductory accounting class varied from 0 total hits to 265 total hits per student. Actual use of the CMS shows students most frequently use written homework solutions, followed by video homework solutions and check figures (homework solutions were posted after the homework was due). Note that the number of written resources exceeded video resources in the study. Survey results indicate students' stated preference for video homework solutions and written homework solutions.

The studies found that use of CMS resources do not appear to impact the course grade achieved by students in the introductory accounting course. The implication is that student entry-level skills are more influential in predicting course grade than other factors, such as CMS use. In contrast, CMS use appears to impact students increased knowledge of the course material as shown by the comparison of post-exam to pre-exam scores. Of all the resources available, student use of videos showed the most significant relationship to improvement in the pre- to post-exam scores.

Recommendations and Future Study

Video technology is increasingly used as an auxiliary resource for traditional classes, hybrid courses, as well as online courses (both asynchronous and synchronous). Given the results of this study, the addition of videos is both appreciated by students and appears to have positive impact on learning.

The results of this study emphasize the importance of going beyond anecdotal evidence when adding student resources to CMS. As faculty, we are excited about new technology uses in the classroom; students affirm their expectation and appreciation of such applications. Yet, it is important to further study the pedagogical efficacy of similar and different CMS technologies and their relationship to learning goal attainment in introductory accounting courses. Doing so will ensure we are not using technological innovations because of their ready availability, our fascination with them, or pressure to use them. Rather, we must determine whether or not auxiliary technologies actually add value to student learning. By evaluating student CMS resources and sharing best practices, we can continue to improve the learning experience for beginning accounting students.

The AY 2011-2012 study about the efficacy of CMS resources in the introductory accounting course will continue with a similar format. Some changes to the study will be made: most significantly, the addition of WebEx study sessions that will be recorded and posted to the CMS. WebEx allows students to meet online with the instructor for group study sessions (www.webex.com).

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Siemens, G. (2006, October). Learning or Management Systems? In: *Connectivism*, http://www.connectivism.ca/?p=243

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www.khanacademy.org/

http://docs.moodle.org/20/en/course/report

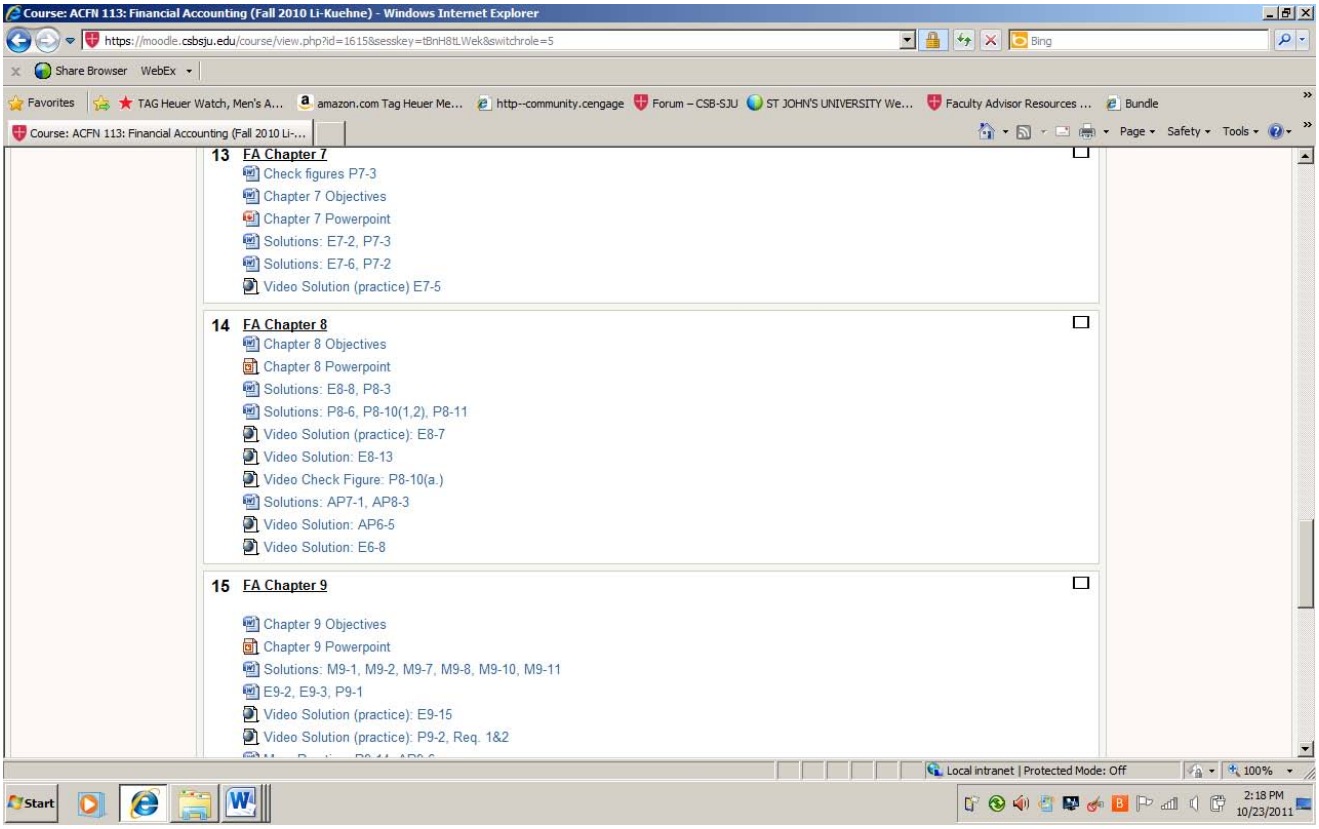
www.techsmith.com/camtasia/

www.webex.com

APPENDICES

Appendix 1

Example Screenshot of Moodle Resources



Appendix 2

Course-end Survey

ACFN 113: Camtasia/Moodle Survey (Fall 2010)
These surveys will be sealed and not viewed until AFTER final semester grades are posted. Your name will be deleted when survey data is entered into the research database.

1. NAME: _____

2. School (Circle one): CSB SJU

3. What is your major? (*circle the appropriate response*)
   a) Management
   b) Accounting and Finance
   c) Economics
   d) Other

If 'Other', specify your major:_____

4. This semester I am a (*circle the appropriate response*)
   a) First Year Student
   b) Second Year Student
   c) Third Year Student
   d) Fourth Year Student

Questions specific to VIDEOS posted to moodle

5. Provide an estimate of the number of moodle videos you viewed this semester: _____.

***Circle the appropriate response using the following scale*:**

1=strongly disagree; 2-disagree; 3=neutral; 4=agree; 5=strongly agree

6. My use of moodle videos helped me to achieve higher grades on exams and quizzes……..…...1 2 3 4 5

7. The moodle videos helped to improve my understanding of concepts……..……1 2 3 4 5

8. I used moodle videos to help me study for exams and quizzes……..…….....…..1 2 3 4 5

9. I used moodle videos to help me with homework assignments ……..……...…...1 2 3 4 5

10. The moodle videos are about the right length……..…….…1 2 3 4 5

11. The moodle videos provide the right amount of information……..…….....1 2 3 4 5

12. I would advise future ACFN 113 students to watch the course moodle videos……..……1 2 3 4 5

13. My use of the video homework solutions increased my understanding of the course material…….....1 2 3 4 5

14. My use of the videos of extra practice problems increased my understanding of the material…..…..1 2 3 4 5

15. ***Write a number between 1 and 4 next to each item below. Put a 1 next the item that would be MOST useful to you in regard to <u>when</u> a moodle video is made available. Put a 2 next to when a video would be second most useful to you, put a 3 next to when a video that would be third most useful to you, and put a 4 when a video would be the LEAST useful to you. <u>Please use each number only ONCE.</u>***

I would find a video most useful if it were posted to moodle:

_____ before a new chapter is introduced

_____ before related homework is due

_____ after I have had a chance to try the homework

_____ as part of review for quizzes or exams

16. Indicate what you liked about the moodle <u>videos</u>:

_____

_____

_____

17. Indicate suggestions for improvements to the moodle <u>videos</u> and any other ideas related to the moodle <u>videos</u>:

_____

_____

_____

<u>GENERAL moodle site questions</u>

18. Estimate the average number of times <u>per week</u> you accessed the course moodle site for any reason: **_____.**

***Circle the appropriate response using the following scale*:**

1=strongly disagree; 2-disagree; 3=neutral; 4=agree; 5=strongly agree

19. My use of the moodle site has helped me achieve higher grades on exams and quizzes……..…1 2 3 4 5

20. My use of the moodle PowerPoint slides increased my understanding of the course material…….1 2 3 4 5

21. My use of the moodle written homework solutions increased my understanding of the material……1 2 3 4 5

22. ***Write a number between 1 and 6 next to each item below. Put a 1 next to the item that would be MOST useful to you on the moodle site, put a 2 next to the item that would be second most useful to you, put a 3 next to the item that would be third most useful to you, put a 4 next to the item that would be fourth most useful to you, put a 5 next to the item that is fifth most useful to you, and put a 6 next to the item that would be the LEAST useful to you on the moodle site. Please use each number only ONCE.***

_____ Announcements and the Syllabus

_____ Video Solutions to Homework Assignments

_____ Written Solutions to Homework Assignments

_____ Videos of Extra Practice Problems

_____ Moodle PowerPoint Slides

_____ Videos that Review Key Aspects of Complex Topics would have been useful

23. Indicate what you liked about any aspect of the course moodle site:

_____

_____

_____

24. Indicate suggestions for improvements to any aspect of the course moodle site:

_____

_____

_____

Continue writing on the back of this sheet if you need more room →

Thank you very much for participating in this survey!

A STUDY OF STUDENT PERFORMANCE IN AN ONLINE *INTRODUCTORY FINANCIAL ACCOUNTING* COURSE COMPARED TO A TRADITIONAL CLASSROOM SETTING

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A STUDY OF STUDENT PERFORMANCE IN AN ONLINE *INTRODUCTORY FINANCIAL ACCOUNTING* COURSE COMPARED TO A TRADITIONAL CLASSROOM SETTING

The use of online courses in higher education has become increasingly widespread in recent years. However, there has been ongoing debate regarding the achievement of certain learning objectives by students and the means of measurement applied by those facilitating various courses, particularly in the field of accounting. Recent opportunities at Louisiana State University in Shreveport have allowed for the study and comparison of student performance in an online course format compared with that of a traditional classroom setting for Introductory Financial Accounting course offerings for the fall semester 2010. The results provide preliminary evident as to the relative merits of the two approaches.

THE STUDY

For the study, the author taught two sections of Introductory Financial Accounting in two different learning environments – online and traditional classroom. This afforded the opportunity to compare the performance of students enrolled in the sections taught in the traditional classroom with that of the online section of the course. At the start of the semester, there were 42 students registered for the classroom section and 28 students registered for the online section.

For consistency in general comparison purposes, the students in each section were assigned the same homework problems, issued quizzes covering the same material, and were administered in substance the same exams. Students participating in the online course physically attended class to complete their exams in the presence of the instructor, but quizzes were administered and completed online compared to the traditional classroom students who completed their quizzes during regular class sessions. Also, students participating in the online course were required to submit online a short weekly assignment whereas students in the classroom course completed the assignment as part of their homework which was then reviewed during regular class sessions with the instructor.

Quizzes

The traditional classroom students were measured on their best five out of seven quizzes administered while the online class students were measured on their best seven out of 10 quizzes administered. The seven quizzes administered to the traditional classroom students were in substance identical to seven of the 10 quizzes administered to the online students. In order to keep students engaged and to help compensate for physical class attendance and traditional in-class participation, the instructor decided to measure student performance on a more frequent basis (10 quizzes) for the online section compared to less (seven quizzes) for the classroom section. In addition, the quizzes for the classroom were administered on specified days/dates in a time-controlled environment on the day/date of the quiz, while the online course students had a window of time (72 hours) during which to complete their quizzes. Also, students in the online section had access to the course text book and any other aids for the quizzes while the traditional classroom students completed their quizzes during the first 10 – 15 minutes of class on previously announced days/dates.

Exams
Students in both sections of the course were required to physically attend class in order to complete the four exams administered during the semester. Exams for both sections were given in a time-controlled environment administered and supervised by the instructor on the same day/date and the substance of each exam for both sections was identical.

All course materials and resources were made available to students in both learning environments. One issue often raised in the debate over the two learning environments is the interaction and discussion that occurs in the classroom setting when compared to the nature of an online setting. In an effort to facilitate similar interaction and discussion within the online group, the instructor made available to students an electronic bulletin board where students had the opportunity to post and share questions or comments about course material with each other and the instructor. These posts *were not* mandatory and were not a means of measurement for the online section.

Withdrawal Dates
Students in both sections had the opportunity to withdraw from the course by specific dates predetermined by university administration. Depending upon these deadlines, students received either no grade or posting on their transcript with tuition refunded in-full or a grade of "W"` with some or no refund.

RESULTS

Comparisons of the student learning, as measured by student performance on quizzes and exams, offered some interesting results. Further examination of the course withdrawal rate, pass/fail ratio, and specifically the overall mean score for each class became even a greater matter of interest than the means of measurement for student learning.

1. Overall quiz mean scores for students who *completed their relative section of the course with a passing grade* was 82.2% for the traditional classroom section compared to 93.9% for the online section.

2. Overall exam mean scores for students who *completed their relative section of the course with a passing grade* was 82.8% for the traditional classroom section compared to 86.7% for the online section.

3. Overall total mean scores for students who *completed their relative section of the course with a passing grade* exclusively including scored quizzes and tests was 82.2% for the traditional classroom section compared to 87.7% for the online section.

Although these measurements seem to lead the reader to believe that students in the online section outperformed the students in the traditional classroom, in looking at the course withdrawal rate and pass/fail ratios, we find a significant matter of interest.

1. 39 of the 42 students, or 92.9%, that initially registered for the traditional classroom section completed the course with a passing grade. Two of the 42 students, or 4.8%, failed the course, and one student received an incomplete grade. ***None*** of the students that originally registered for the class withdrew from the course, but rather tried to complete the course as best possible.

2. 19 of the 28 students, or 67.9%, that initially registered for the online section completed the course with a passing grade; *significantly lower* than the completion and pass rate for the traditional classroom section. Three of the 28 students, or 10.7%, failed the course, and *six of the students, or 21.4%, originally registered withdrew* from the class by the designated deadline.

   Discussions with students who withdrew from the online section revealed that their primary reasons for doing so were 1) the course was more challenging and time-consuming than initially expected, and 2) the students felt that they would attain a better learning experience and grade for the course in a traditional classroom setting. These students further indicated that while they were able to comprehend the material provided in an online English or Composition course previously completed, they were unable to comprehend the material covered in the online version of the Introductory Financial Accounting course.

Revisiting the results of each section to include all students who completed their respective section ***regardless of a passing grade*** reveals yet another matter of interest, particularly pertaining to the comparison of overall exam mean scores.

1. Overall quiz mean scores for all students who *completed their section regardless of passing grade* for the traditional classroom section was 81.0% compared to the online course of 91.0%.

2. Overall exam mean scores for all students who *completed their section regardless of passing grade* for the traditional classroom section was 80.2% compared to the online section of 79.1%.

3. Overall total mean scores for the students who completed their section regardless of passing grade for the traditional classroom section was 80.3% compared to the online section of 80.9%.

CONCLUSION

Although the fall semester was the first in which the Business School at Louisiana State University in Shreveport offered its Introductory Financial Accounting course online, the school and university in its entirety plan to potentially expand online offerings in the future. How we measure the results of these initial courses is critical to ensuring future courses are successfully developed, implemented, and modified.

It seems no surprise that the overall quiz mean scores for all students who completed their section with or without a passing grade for the online section surpassed those in the traditional classroom setting. In addition to having more time to complete each quiz, and perhaps more so a contributing factor, was the ability of students to use their text books and other aids. However, there is very little difference between the overall exam mean scores for all students who completed their section with or without a passing grade. In fact, students in the online section actually scored 1.1 percentage points below the traditional classroom students. These results seem to indicate that students in both sections had a relatively similar comprehension of the tested material, and that both online and traditional classroom settings can potentially provide quality means for student learning. Finally, both faculty and students need to shed any misperception that online course sections are "easier" than courses held in a traditional classroom setting, particularly in highly technical areas such as accounting, finance, statistics, etc. to ensure few withdrawals and failing scores for students encountering online courses for the first time.

HOMEWORK POLICY: COMPUTERIZED VERSUS COMPUTERIZED AND HAND-WRITTEN HOMEWORK IN INTRODUCTORY FINANCIAL ACCOUNTING

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HOMEWORK POLICY: COMPUTERIZED VERSUS COMPUTERIZED AND HAND-WRITTEN HOMEWORK IN INTRODUCTORY FINANCIAL ACCOUNTING

INTRODUCTION

Textbook publishers offer computerized homework packages for most introductory accounting textbooks. Using only the computer for graded homework has led to some instructors asking whether students gain the same level of understanding of introductory accounting using only the computer versus using the computer and working some accounting problems with pencil and paper. This study compares student performance for two treatment groups, students whose graded homework was all computerized assignments and students whose graded homework was a combination of computerized and hand-written assignments. Significant differences were found between the two groups.

An introductory financial accounting course is required for all students majoring in business at most colleges and universities. One of the most important things a student can do to be successful in introductory accounting is to do the homework, but historically many students fail to do so. To encourage working homework, instructors often include graded homework in the course requirements. Computerized homework packages are highly efficient for grading homework and tracking progress. Reports on an individual student's progress or on performance of the entire class are instantly available throughout the semester. Four years before the experiment described in this paper, computerized homework software was adopted in the introductory financial accounting course at the university where the study was conducted.

Anecdotally, one instructor in the introductory financial accounting course had the impression that students were not demonstrating as much understanding of the material as a result of using only the computer for homework. This instructor indicated that he was collecting and grading some hand-written homework in his section because he felt the students learned more by writing out the solutions to the homework problems. Discussions with other faculty members found similar impressions. These discussions led to an experiment to determine whether students performed better if all of their graded homework was computerized or if the graded items were a combination of computerized and hand-written assignments.

EXPERIMENT

The method of homework, computerized homework only or a combination of computerized and hand-written homework, was studied. The experiment was conducted at an AACSB accredited university with enrollments in introductory accounting of 800 to 900 students each year. The course was coordinated with a common textbook, common course syllabus, and common comprehensive final exam used in all sections. The common course syllabus assigned identical homework in all sections. Each instructor wrote his/her own exams during the semester, but the total points assigned to these exams were the same for all sections. Each instructor assigned the course grades to the students in his/her section(s).

In the experiment year, 23 sections of introductory accounting were offered with 37-40 students initially enrolled per section. Ten different instructors taught the course, some with only

one section for one semester. The instructors included tenured Ph.D., fixed term, and adjunct faculty. A course coordinator wrote the course syllabus and common final exam.

As mentioned above, during fall semester, one instructor required a combination of computerized and hand-written homework in his section. For spring semester, a request was made for instructors who were willing to require a combination of computerized and hand-written homework. Three instructors agreed to collect and hand grade part of the homework. One hundred points were assigned to homework both semesters in all sections. The 100 points were divided between the computerized and hand-written homework in those sections collecting and grading hand-written homework. Senior accounting majors who worked in the tutoring lab assisted with grading. In total, five of the ten sections offered in spring semester 2010 included some hand-written homework. The other five sections required only computerized homework. With the inclusion of the 13 sections for fall semester, six sections included some hand-written homework, and 17 sections required only computerized homework. The results for these two homework treatment groups are described below.

RESULTS AND ANALYSIS

Since the final exam was comprehensive and common to all sections, performance on the final exam was used as a measure of overall performance. The same textbook, assignments, and final exam were used for both semesters. The final exam contained 75 multiple-choice questions at two points each and was machine graded. Means were computed for the two homework treatment groups. The means for the computerized homework group and computerized and hand-written homework group were 82.3 and 85.5, respectively, for those students that took the final exam (530 and 182, respectively). The two group means were then compared using Student's t-test. The t-test for the two groups showed the difference between the means to be significant at the 5 percent level with a critical P-Value of .0303. Students doing a combination of computerized and hand-written homework performed better than students who did computerized homework exclusively.

Since ten different instructors taught the course, the results could be driven by instructor effects. To address this possibility, six sections taught by one instructor were examined. Three of these sections required only computerized homework and three sections required a combination of computerized and hand-written homework. The 100 points assigned to homework were divided 70/30 between the computer-graded homework and hand-written, hand-graded homework. For the hand-graded homework, solutions were corrected and returned at the next class. For the computerized homework, students were given unlimited feedback before submission and were provided with the solution after submission. Whether worked by hand or by computer, even a weak student could earn virtually all of the homework points with enough effort.

Means were computed for the final exam scores for the students in the two homework treatment groups. The means were then compared using Student's t-test. The t-test showed that the difference between the means was not significant at the 10 percent level, but the t-test results were significant at the 11.7 percent level. Performance was better for the students doing a combination of computerized and hand-written homework. Reduced sample size (compared with considering all sections) reduced the power of the test.

Next, course grades for the two groups were compared. Letter grades for the course were compared and appeared to be significantly higher in the group with both computerized and hand-written homework. Grades were converted to a four point scale, means were computed, and a t-test was performed. The difference in means was significant at the 10 percent level. Course grades for the two treatment groups are shown in Table 1.

Table 1
Comparison of Course Grades
For Treatment Groups Taught by One Instructor

Computerized Homework Group			Computerized and Hand-Written Homework Group		
Course Grade	**Students**	**Percentage of Students**	**Course Grade**	**Students**	**Percentage of Students**
A	9	10.1%	A	14	15.4%
B	24	27.0%	B	28	30.8%
C	30	33.7%	C	31	34.0%
D	15	16.8%	D	10	11.0%
F	11	12.4%	F	8	8.8%
Total	89	100.0%	Total	91	100.0%

Given the significance of the difference in mean course grades, performance must have varied on the four 50-point exams given throughout the semester. Means for all of the exams and for total points in the course were computed and t-tests were performed. These means and the means described above are summarized in Table 2.

Table 2
Comparison of Exam Scores and Course Grades
For Treatment Groups Taught by One Instructor

	Means		Critical P-Value
	Computerized Homework Only	**Computerized and Hand-Written Homework**	
Exam 1	39.2	39.5	.403
Exam 2	33.5	36.2	.0196**
Exam 3	33.7	35.8	.0458**
Exam 4	30.1	32.49	.0481**
Final Exam	82.91	86.31	.1172
Total Course Points	329.47	349.81	.0197**
Course Grade on 4-Point Basis	2.076	2.329	.0729*

**Significant at the 5 percent level
* Significant at the 10 percent level

A feature of the course is that a hand-written comprehensive problem (covering all steps of the accounting cycle) was assigned prior to the first exam. Thus, all students had a combination of computerized homework and hand-written assignments before the first exam. This feature was a convenient control for student scores on the subsequent examinations. It allowed a test for differences between the soon-to-be computerized homework only students and

the computerized and hand-written homework students. No statistically significant performance difference was found between these two groups on the first exam as shown by the P-value in Table 2.

For the second, third, and fourth exams, the difference in means was significant at the 5 percent level. The difference in the means of total course points was also significant at the 5 percent level. Mean scores were higher for the group that worked a combination of computerized and hand-written homework.

Overall, student performance was better when students were required to work and turn in some homework using pencil and paper. One explanation could be that different students have different learning styles, and using a combination of homework techniques accommodated the different learning styles. The result could also be due to the additional attention being paid by the instructor. The act of collecting and returning the corrected hand-written homework could have given the students the feeling that their instructor was more involved in their performance in the course, thus providing motivation. Either way, the evidence suggests improvement in learning from requiring and grading a combination of computerized and hand-written homework.

The results of this experiment are only relevant if homework contributes to student performance. To look for an association between overall performance and homework, the grades on the comprehensive final exam were compared with the average percentage of successful homework completion. The results are presented in Table 3.

Table 3
Comparison of Final Exam Grades and Average Homework Percentage
For Treatment Groups Taught by One Instructor

Computerized Homework Group			Computerized and Hand-Written Homework Group		
Final Exam Grade	**Students**	**Average Homework Percentage**	**Final Exam Grade**	**Students**	**Average Homework Percentage**
A	8	93.7%	A	13	93.5%
B	18	84.1%	B	20	87.1%
C	33	62.9%	C	33	77.2%
D	21	47.7%	D	18	54.6%
F	9	31.7%	F	7	51.1%
Total	89		Total	91	

Clearly, doing the homework was essential for learning accounting. With 30-50 percent homework success rates, students really had no hope of being successful on the final examination. Moreover, students who demonstrate mastery of only half or less of the homework material with open resources (textbook, class notes, tutoring lab, faculty office hours, etc.) and ample time should not pass the course. Since all of the exams in the course were timed, closed book, and closed notes, the homework points were the easiest points to earn in the course. Even so, most students did not do all of the homework.

CONCLUSION

Today's students are comfortable using computers and seem to prefer using the computer for doing their homework. The results of this experiment indicate that using computer software for homework is even more effective when combined with some hand-written homework. A mix of 70% computerized and 30% hand-written homework was examined in this study. Comments from students indicated a positive response to hand working some of the homework. While doing some homework by hand may have improved performance, the additional attention and interest shown by their instructor may also have made the difference. Either way, exam scores improved.

Accounting is a subject that requires students to put a good deal of time into doing homework and otherwise studying the material to be successful. Using the computer makes it easier for students to do their homework. In addition, computerized homework packages are extremely useful and reduce grading time for instructors who wish to grade homework. This experiment suggests, however, that collecting and grading some hand-written homework improves performance.

USING OUTKAST ON TOUR: AN INSTRUCTIONAL MINI-CASE FOR LEARNING ACCRUAL ACCOUNTING CONCEPTS

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USING OUTKAST ON TOUR: AN INSTRUCTIONAL MINI-CASE FOR LEARNING ACCRUAL ACCOUNTING CONCEPTS

INTRODUCTION

OutKast on Tour is a classroom resource that enables students to understand the essence of accrual accounting. It covers concert revenue recognition for a band and the corresponding expense recognition for three purchasers of concert tickets. Adele pays cash for her ticket one month before the concert; Bono buys a ticket for cash as the concert begins; and Carrie pays for her ticket one month after the concert. There are no other possible relationships (before, same day, or after) regarding cash transfer and recognition of revenues and expenses.

This problem is designed for use early in the *introductory accounting* course: after the second chapter for most *Accounting Principles* textbooks. After completing two chapters, most students understand concepts relating to revenue and expense recognition regarding transactions for which cash transfers (receipts and payments) occur either *simultaneous to* or *after* revenue and expense transactions. Using *OutKast on Tour* enables students to grasp concepts relating to cash transfers that occur prior to revenue and expense recognition. This serves as a foundation for understanding prepaid expenses, unearned revenues, adjusting entries, and other accrual accounting issues (that are covered in the third chapter of most *Accounting Principles* textbooks). Students learn the following fundamental concept: under accrual accounting: the timing of revenues and expense recognition is not dependent on the receipt of cash (for revenues) or payment of cash (for expenses).

The author uses the resource in the following manner:

A. He assigns the *OutKast on Tour* problem on the two pages that follow.
B. Students discuss the problem in class for 35-45 minutes, with the instructor serving as discussion leader. He reproduces the *Revenues Journal Entries* exhibit on the classroom whiteboard for use during discussions. After completing coverage of revenues, he repeats the process for discussing *Expenses Journal Entries*. He explains to students that detailed note-taking is unnecessary, because he will distribute a *solution note*. After the discussions, he distributes *OutKast on Tour Solution Note* and *Note Regarding Adjusting Entries for Prepaid Assets* (included below) during the course of the discussion.

The *OutKast on Tour Discussion Notes* page in this document provides guidance for instructors in leading the classroom discussion.

OUTKAST ON TOUR

OutKast scheduled the "Hey Ya!" Tour during the summer of 2011. On August 15, OutKast performed at the Laska Center.

A. On July 15, Adele paid $100 to purchase a ticket for the concert.
B. On August 15, just prior to the concert, Bono paid $100 to purchase a ticket for the concert
C. OutKast permitted Carrie to purchase a concert ticket for $100 on credit. She paid for the ticket one month later on September 15.

Requirement 1: For OutKast, prepare the journal entries that should be recorded regarding cash received and concert revenue earned for these three tickets on July 15, August 15, and September 15.

Journal Entries

REVENUES

	July 15			August 15			September 15		
		DR	CR		DR	CR		DR	CR
A (for Adele's ticket) Cash received before critical event	Cash	100			100				
			100			100			
B (for Bono's ticket) Cash received on same day as critical event				Cash	100				
						100			
C (for Carrie's ticket) Cash received after critical event					100		Cash	100	
						100			100

Case A: Cash is received before revenue is recognized (deferred revenue). Chapter 3 example: Unearned Revenue → Revenue
Case B: Cash is received on same day as revenue is recognized. This is covered in Chapter 1.
Case C: Cash is received after revenue is recognized (accrued revenue). This is covered in Chapter 1.

Requirement 2: For Adele, Bono, and Carrie, prepare the journal entries that should be recorded regarding cash paid and entertainment expense recognized for these three tickets on July 15, August 15, and September 15.

Journal Entries

EXPENSES

		DR	CR		DR	CR		DR	CR
A (for Adele's ticket)									
Cash received before		100			100				
critical event	Cash		100			100			
B (for Bono's ticket)									
Cash received on same					100				
day as critical event				Cash		100			
C (for Carrie's ticket)									
Cash received after					100			100	
critical event						100	Cash		100

Case A: Cash is paid before expense is recognized (deferred expense). Chap. 3 example: Prepaid Insurance → Insurance Expense

Case B: Cash is paid on same day as expense is recognized. This is covered in Chapter 1.

Case C: Cash is paid after expense is recognized (accrued expense). This is covered in Chapter 1.

OUTKAST ON TOUR
SOLUTION HANDOUT

REVENUES

	July 15			August 15			September 15		
		DR	CR		DR	CR		DR	CR
A (for Adele's ticket) Cash received before critical event	Cash	100		Unearned Concert Revenue	100				
	Unearned Concert Revenue		100	Concert Revenue		100			
B (for Bono's ticket) Cash received on same day as critical event				Cash	100				
				Concert Revenue		100			
C (for Carrie's ticket) Cash received after critical event				Accounts Receivable	100		Cash	100	
				Concert Revenue		100	Accounts Receivable		100

Case A: Cash is received before revenue is recognized (deferred revenue). Chapter 3 Example: Unearned Revenue →Revenue
Case B: Cash is received on same day as revenue is recognized. This is covered in Chapter 1.
Case C: Cash is received after revenue is recognized (accrued revenue. This is covered in Chapter 1.

		DR	CR		DR	CR		DR	CR
A (for Adele's ticket) Cash received before critical event	Prepaid Concert Ticket	100		Entertainment Expense	100				
	Cash		100	Prepaid Concert Ticket		100			
B (for Bono's ticket) Cash received on same day as critical event				Entertainment Expense	100				
				Cash		100			
C (for Carrie's ticket) Cash received after critical event				Entertainment Expense	100		Accounts Payable	100	
				Accounts Payable		100	Cash		100

Case A: Cash is paid before expense is recognized (deferred expense). Chap. 3 Example: Prepaid Insurance → Insurance Expense
Case B: Cash is paid on same day as expense is recognized. This is covered in Chapter 1.
Case C: Cash is paid after expense is recognized (accrued expense) This is covered in Chapter 1.

OUTKAST ON TOUR
DISCUSSION NOTES

Use of this instructional resource enables students to understand the essence of accrual accounting. It provides an opportunity for classroom discussion of the criteria for recognition of revenues and expenses. Covering this problem provide a foundation for understanding adjusting entries, unearned revenues and prepaid assets (prepaid expenses and plant & equipment).

Revenue Considerations

There are only three possible relationships Regarding the recognition of revenue and the corresponding receipt of cash

- Revenues can be recognized after the corresponding receipt of cash.
- Revenues can be recognized at the same time as the corresponding receipt of cash.
- Revenues can be recognized before the corresponding receipt of cash.

After completing the journal entries, instructor should ask the students: "What is common among the three journal entries on the day of the concert, August 15?" The ensuing discussion should cover the essence of accrual accounting for revenues: No matter whether earning event takes place after, at the same time as, or before the receipt of cash, *Concert Revenue* is recognized on the day of the earning event (i.e., completion of the concert in the OutKast case)!

Expense Considerations

There are only three possible relationships regarding the recognition of expenses and the corresponding payment of cash

- Expenses can be recognized after the corresponding payment of cash.
- Expenses can be recognized at the same time as the corresponding receipt of cash.
- Expenses can be recognized before the corresponding receipt of cash.

After completing the journal entries, the instructor should ask the students: "What is common among the three journal entries on the day of the concert, August 15?" The ensuing discussion should cover the essence of accrual accounting: No matter whether the service is provided after, at the same time as, or before the payment of cash, *Concert Expense* is recognized on the day of the service provided (i.e., completion of the concert in the OutKast case)!

In order to relate the concepts learned to textbook topics regarding *prepaid assets*, instructor can distribute and discuss the *Note Regarding Adjusting Entries for Prepaid Assets* handout on the page that follows.

NOTE REGARDING ADJUSTING ENTRIES FOR PREPAID ASSETS

In the *OutKast on Tour* example, Adele's purchase of a ticket (an asset) is similar to a company purchasing an asset such as:

- Prepaid Insurance
- Prepaid Rent
- Supplies
- Equipment

The table below explains what happens at the time of purchase and when the asset loses value.

	General Case	**OutKast Example**	**Entries for Prepaid Assets**	
	Recording the transactions for assets that get used up. Journal Entries are:	**For Purchaser (Adele) Assume that Adele bought tickets to a series of 12 monthly concerts.**	**For Purchaser (Buyer) Assume that Buyer bought Insurance coverage (in advance) for 12 months**	**For Purchaser (Buyer) Assume that Buyer bought Rent coverage (in advance) for 12 months**
At time of Purchase →	Asset DR Cash CR	Prepaid Tickets 1,200 Cash 1,200	Prepaid Insurance 1,200 Cash 1,200	Prepaid Rent 1,200 Cash 1,200
When the Asset loses value →	_____Expense DR Asset CR	Ent'ment Expense 100 Prepaid Tickets 100	Insurance Expense 100 Prepaid Insurance 100	Rent Expense 100 Prepaid Rent 100

Note regarding Plant, & Equipment (P&E): When Equipment (or other P & E) is depreciates, the corresponding adjusting journal entry records a debit to "Depreciation Expense" and a credit to "Accumulated Depreciation: Equipment." Since the two accounts," Equipment" and "Accumulated Depreciation: Equipment," together comprise the *book value* of the equipment asset, the credit to Accumulated Depreciation reduces the value (book value) of the equipment asset

RELATED READINGS

Needles, B. E., M. Powers, and S. Crosson. 2011. *Principles of Accounting.* 11th edition. Mason, OH. Cengage Learning (South-Western Publishing Co.).

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PRESENTATIONS WITH MAXIMUM IMPACT: HELPING STUDENTS SUCCEED

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PRESENTATIONS WITH MAXIMUM IMPACT: HELPING STUDENTS SUCCEED

INTRODUCTION

The twenty-first century accounting professional desperately needs strong communication skills. The AICPA lists communication as one of the required personal competencies in its Core Competency Framework. College recruiters cite communication skills as one of the most desirable qualities of new hires. Communication encompasses a wide range of interactions from face-to-face and phone conversations, electronic messages, written documents, and formal presentations. This article addresses formal presentations. Accounting faculty members have long recognized that preparing students for the profession included emphasis on giving effective presentations. Students in most accounting programs present multiple times before graduation, both individually and in teams.

The training and guidance given to students about how to best give presentations varies widely among instructors. While most faculty are comfortable critiquing content from students, judging style is much more subjective. In an effort to give students concrete guidance on how to improve the style of their presentations, we set out to review current ideas about how to best communicate in this way. We found an abundance of resources available on the topic. The advice from different authors often converges into common themes, but at times it is also points in directly opposite directions. In addition, books on the topic also appeal to different audiences with varying skill levels.

Our objective in this article is to give instructors a brief review of three books that we believe are accessible reading for current students. We found them to be engaging, entertaining and written at a great level for beginners. Instructors could use them in a number of ways within their courses. All three of the books can simply be designated as optional supplementary reading. If students were motivated to pick one of the books up, most of them would find them informative and enjoyable. The instructor could assign one book to the class to read through together with in-class discussions and short examples. Alternatively, instructors could assign each of the books to different groups.

Secondly, we came across other readings that were full of great suggestions and ideas, but were presented to a more devoted audience, possibly even with substantial experience in giving presentations. Our objective in the companion article is to provide faculty members a listing of what we found to be the most compelling tips from these books. Instructors can glean from the list ways to improve their own presentations both in class and in other settings. Further, they could use this list to create training material for their students. The books referenced in the second piece are great resources for faculty, but might not be as reachable for current traditional college students.

BOOK SELECTIONS

We review three books below that accounting faculty can use successfully to give their students concrete ideas on improving their ability to make presentations. We identified a catch-

phrase for each of the books to help the reader distinguish among the different tones and settings. For all three selections, we explain why the book is appealing, the key lessons, and what makes it unique.

Celebrity Spotlight: *The Presentation Secrets of Steve Jobs: How to be Insanely Great in Front of Any Audience* (Gallo, 2010)

Audience appeal. Steve Jobs is a household name and is credited for creating products that today's students use every day. The book reads with a motivational tone that inspires the reader. Gallo says that the purpose of this book is to "Take your passion and turn it into a story so mesmerizing that people will want to help you achieve your vision (p. xvii)." Since Jobs is such a successful presenter, the book proposes to outline exactly what he does and show how his expertise can be imitated.

Lessons learned. The book models Jobs' technique of organizing in groups of three. The three main parts of the book are given as acts with scenes in each act and intermissions between the acts.

Act 1: Create the story. This section consists of eight scenes that provide practical tools to craft an exciting story. The beginning of preparing a great presentation starts on paper. From there the speaker must address why the audience should care about his topic. Other scenes include instructions to 1) speak with passion, enthusiasm, and energy, 2) reduce the main concept to a "twitter-like headline", and 3) introduce suspense and then deliver a three-point outline. Finally, Gallo reminds speakers that crafting the story must focus on solving a problem for the audience, not just a product.

Act 2: Deliver the experience. This act includes six scenes focused on stage presence. Advice is given on using simple and striking visuals with pictures, not bullet points. Other topics include word choice, use of props, and integration of guest speakers. The author coaches speakers to create a memorable moment that will be retained by the audience after the presentation.

Act 3: Refine and rehearse. Five scenes comprise the final act which emphasizes the need for practice. Jobs practices for days before a presentation. Scene 17 details steps for each round of practice that eventually leaves the speaker ready to go without notes. This act demonstrates the extensive amount of time required to develop a Jobs-like, near flawless presentation.

Distinctives. This book provides nice summaries at the beginning and end of each chapter. The author also creates intermissions between the acts that review what was learned. Gallo successfully delivers technical content in an interesting context by evaluating a well-known master.

Devil is in the Details: *The Exceptional Presenter* (Koegel, 2007)

Audience appeal. Students will enjoy this book as it is brimming with skills, tips and techniques for presenters. Koegel writes the book with a "get after it" attitude using hip and youthful language. Koegel also relates to a student audience by assuring the reader that exceptional presenting can be learned. He adds that his book, "is not rocket science, it's rocket fuel (p. 14)". The first three chapters of the book are motivational, encouraging the reader to seriously commit to being good at presenting. He then provides concrete ways to do just that such as seek feedback, get a professional coach, and videotape yourself.

Lessons learned. The number of specific tips and ideas are too numerous to summarize. Koegel is so detailed he even provides a list of what and what not to eat before presenting. However, the specificity can give a level of comfort to someone genuinely wanting to improve. After the motivational opening, the heart of the book marches through his acronym for great presenting (OPEN UP!).

Organized. Every good presentation needs structure. It's important to both be organized and look organized. Koegel encourages readers to write out the two pieces of information the audience should take away from the presentation. He adds great thoughts about ending the session with a purpose statement, given both before and after question time. He admonishes presenters that they should be able to give the presentation without technology or they do not know the material well enough.

Passionate. Key to this point is that, "Passionate presenters are more persuasive (p. 54)." However, Koegel cautions that non-verbal messages override anything being said. He follows this idea with a multitude of precise directions on body movement and positions. Tips such as stand with hands by your side, do not lean on a lectern, and rest hands on a lectern instead of gripping the outside are a few of the suggestions.

Engaging. Presenters should build rapport quickly by involving the audience early and often. Connect with listeners by speaking about what is important to them. Engaging presenters use eye contact with the entire audience, not just the friendly faces. Using quotes and amusing stories also make the group laugh and tune into the speaker. This chapter also includes a great list of what bored and attentive audiences look like.

Natural. The speaker must look at ease and draw the audience into the moment. However, looking natural does not always come naturally and is often the result of dedicated rehearsing. The author also points out the importance of making sure the presenters voice is easy to listen to and sounds natural.

Understand your audience. Koegel covers traditional ground here by advising presenters to do their homework and research the audience. He gives specific ways to go about the research so the reader has a roadmap to follow. A few of the tips include talking with people within the organization, reading marketing material and browsing their Web site.

Practice. Becoming an exceptional presenter is a matter of making the skills outlined in the book personal habits. The great thing about habits is that the presenter can rely on them in pressure situations. But these habits are formed through practice which cannot be avoided. The

chapter begins with a quote from Aristotle that sums up his thoughts, "We are what we repeatedly do. Excellence, then, is not an act, but a habit (p. 129)." Koegel adds more informative details after the core OPEN UP! discussion. He addresses how to handle questions, channel nervous energy and create an introduction. He closes by inspiring the reader that anyone can be exceptional, not to accept average.

Distinctives. The volume of detailed advice is almost unparalleled, but Koegel also makes it seem completely doable. He illustrates with real stories that interest the reader. This book stands out from others in that offers active exercises and reproducible fill in the blank handouts.

Reality Check: *Why Business People Speak Like Idiots: A Bullfighter's Guide* (Fugere et al., 2005)

Audience appeal. Students will enjoy this book as it focuses on how bad current business communication can be. The authors pursue the idea that current business people can help themselves stand out as presenters if they only make a few easy changes. The book uses the casual vernacular of the college student generation to engage the reader and add humor.

Lessons learned. The authors present their contention that business communication is stilted, full of jargon, and completely opposite of the way people speak in their 'real' life. In real life, people show their personality and speak with candor. The authors break down the biggest problems and provide solutions to these problems as they go. The four biggest traps are obscurity, anonymity, hard sell, and tedium.

The obscurity trap. The components of the obscurity trap are jargon, wordiness and evasiveness. Speakers fall who fall prey to using a lot of jargon are not keeping the audience in mind. To connect with the audience, "inform them instead of trying to impress them (p.17)." The authors point out that acronyms are another quick way to slide into jargon that doesn't connect. Further, they urge speakers to focus on brevity to be memorable. Presenters should strive for shorter presentations, with short sentences and even punchy short words.

The anonymity trap. Much of the communication within businesses becomes standardized over time. This makes the messages feel the same, and the speaker loses identity. One way to overcome this anonymity is to lose the prepared templates and create something original. Insert stories, props, video clips, or great photos to break out of the bullet-point rut. Second, speak naturally, too much polish can sound prefabricated. Rehearsing is important, but the unplanned moments are often the most authentic and memorable. Lastly, one of the best ways to stand out from the anonymous business crowd is to use humor. Speakers do not need to be comedians to add self-deprecating funny stories, a quick parody or anecdote that lightens the moment.

The hard-sell trap. Candid communication often disappears when the speaker is trying to sell the audience on a product or idea. Audiences sense the disingenuous approach and tune out. Fugere et al. remind speakers that people hate to be sold, but they love to buy. Focus on the needs of the audience and then clearly present the solutions offered without overdoing it. The

audience can make the connection. The hard-sell trap should also be avoided when bad news must be delivered. Business leaders are often so focused on being positive, that they mistakenly try to spin bad news. When results are poor or other difficult messages must be delivered, do it plainly and move on.

The tedium trap. Business is often boring, present the message clearly and with some entertainment. Don't force the audience members to endure lots of details they can't remember. For example, specific statistics are more interesting than vague assertions. Stories are more interesting than theory or facts alone. Pictures are more engaging than clip art. While substance is essential, style helps the presenter connect. The authors close this section by reminding the reader that one of the best ways to avoid tedium is to bring out more of his own personality.

Distinctives. By focusing on the worst of current communication practices, this book takes a unique, and often hilarious, approach. The authors focus on presentations, but other business communication like voicemail and e-mail are addressed. The book even has a companion webpage with software to download that detects the amount of jargon in documents.

SUMMARY

Current accounting students will be called on to give presentations before graduation and in their careers. Students will need to have both a clear understanding of their material and effective ways to share that with the audience. Accounting instructors can help students improve this skill by incorporating interesting and entertaining books that address the topic. The books can be used in a variety of ways as decided by the faculty member. Including this advice benefits the students by giving them concrete suggestions to implement. Adding specificity to the skill of presentation delivery also helps the faculty member assess student presentations with more accuracy and objectivity.

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