Integrating Sustainability Concepts in Introductory Managerial Accounting
By: Stacey Whitecotton

When I was first asked whether I cover sustainability concepts in my managerial course, my initial reaction was “Why? What does sustainability have to do with accounting? I don’t have enough time to cover the core managerial topics, much less add more. Plus isn’t “sustainability” just the latest buzz word and a way for companies to boost their reputation with consumers and other stakeholders?”

Although I was skeptical at first, after digging a little deeper and doing some research to find examples of companies that have adopted truly sustainable business strategies, I now see the value of the topic and believe it should be introduced in managerial accounting. Most of the students I teach are not going to be accounting majors and sustainability is a very important business topic. In this brief article, I will try to convince you of the same and give you some simple suggestions for how you can integrate it into your managerial accounting course without taking away from the other important topics that you also need to cover.

First, what is sustainability? A google search will return many definitions, most of which stem from a 1987 United Nations report which first use the term “sustainable development” or “development that meets the needs of the present without sacrificing the ability of future generations to meet their own needs”. Today, sustainability is commonly represented by the triple bottom line, which measures performance on three dimensions: Social (People), Economic (Profit) and Environmental (Planet). The triple bottom line is often referred to as “3 Ps” and is visually represented by a venn diagram that has sustainability at the intersection of the three circles (people, profit and planet).
To provide a historical perspective, I created the following visual to show how sustainability has evolved over time.

Evolving Role of Sustainability Accounting

The diagram on the left shows the traditional role of business, which is to generate profits for shareholders. Historically, for-profit companies gave little consideration to their impact on society (people) or the environment (planet). I tell students that the profit circle should, in reality, be much larger than the other two circles and ask them to give examples of companies that generate profits at the expense of the other two dimensions. It is not difficult for students to come up with examples in many different industries, including manufacturing, oil and gas, etc.

The middle diagram shows the current depiction of sustainability, which is at the intersection of economic, social and environmental performance. Although sustainability is an emerging topic, the extent of overlap among the three areas is still relatively small. **Sustainability accounting** is the **measurement** of triple-bottom line performance. As accountants we are good at measuring profit, but how do we measure environmental impact and social responsibility? I emphasize to students that they need to think about **stakeholders** not just **stockholders**, and ask them to give examples of companies that are able to generate profits while being socially responsible and/or protecting the environment. Students will usually come up with examples such as solar energy firms, Toms shoes, or the Starbucks employee education program.

The last diagram shows a more idealistic world where sustainability plays a much larger role in business. To reach this stage, companies must integrate sustainability practices and principles as part of their core business strategy and it should permeate everything they do. Managers that want to use sustainability to create a competitive advantage must find innovative ways to improve performance on all three dimensions of the triple bottom line.

This general framework sets the stage for later efforts to integrate sustainability into the course, using the following general guidelines:

- Talk about sustainability throughout the entire course, not just as a 5 minute sound bite at the beginning or end of the course.
- Keep it simple. Refer back to the triple bottom line framework and ask them how different managerial actions would impacts the three dimensions.
- Tie it to other course material. It is easier with some topics than others, particularly the decision making topics and the balanced scorecard.
Emphasize that sustainability extends beyond “green” or “eco-friendly”. The social dimension is important but often overlooked.

Here are a few specific examples I use:

- Ask students to classify different managerial initiatives in terms of the impact on the triple bottom line.
- Process improvement and cost reduction. I use an example of an eco-friendly wine company that reduced the amount of glass used in each bottle, saving fuel costs, transportation cost, etc. Have students compute the cost savings and discuss the impact on the triple bottom line.
- Cost behavior. I use an example of a coffee company that implements a “reusable mug” promotion in an attempt to reduce the waste and cost of paper cups.
- Make or buy scenario involving overseas production using low cost, under-aged labor.
- CVP analysis for a company that donates one sweatshirt or backpack for every one they sell.
- Evaluating capital project on financial measures (e.g. NPV, IRR) and qualitative considerations (social and environmental).
- Linking sustainability to corporate strategy using the balanced scorecard

My goal is to teach the same topics that I would normally be teaching, but bring sustainability into the discussion so that my students are familiar with the triple bottom line and the need to balance multiple goals and priorities.

_Stacey Whitecotton is an associate professor of accounting at the W. P. Carey School of Accountancy and Information Management at Arizona State University._

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Message from the President

Greetings Everyone. Hopefully, you are enjoying your summer. Some of us will use this time to re-vamp our classes for the next school year or work towards improving effectiveness in the classroom. Others may just recharge. This past semester, I attended several events which gave me the opportunity to work with faculty representing various sections of AAA, TACTYC and other professional organizations. As a result, I continue to be inspired by the commitment of our faculty and colleagues towards improving student learning and retention, our desire to use effective teaching techniques within our classrooms and effective utilization of classroom technology and effective assessment measures.

As many of you, I look forward to visiting San Diego, California in August to participate in the upcoming 2017 celebration of AAA’s 101th year which includes the Conference for Teaching and Learning Accounting (CTLA). The theme of this year’s meeting, “Imagining Our Future,” will explore the various ways we can shape the future of accounting as we embark on the AAA’s second century. We will have several innovative teaching related sessions designed to exchange best practices as well as foster collaborations among all stakeholders.

I look forward to seeing new and returning members at the annual meeting. As teachers at two-year colleges, we have been given a reduced membership fee to several events and the regional meetings are including more instructional-oriented sessions. Let’s help “spread the word” to our fellow colleagues about these changes.

I sincerely appreciate everyone who has volunteered to lead or assist at one of the TYC sessions. Please share your desire for more involvement in the TYC Section with me or any of the officers, and we will readily accept your involvement.

These are promising and challenging times. Let’s take the initiative and continue to work together to help shape the future of accounting education. We have the desire, the knowledge, and after you recharge your batteries over the summer, join us in San Diego to get energized.

- Sidney
Welcome to the Summer 2017 edition of *The Communicator*! We are eagerly anticipating the Annual Meeting in San Diego in August. In the words of Robert John Meehan, “The most valuable resource that all teachers have is each other. Without collaboration our growth is limited to our own perspective”. We hope everyone is looking forward to gaining new perspectives, and growing in knowledge at the annual meeting. In this edition, we list the Two Year College sessions offered during the conference. These sessions center on strategies to enhance teaching methods, encourage active learning, and infuse energy into our courses with existing and emerging technologies.

Our focus in this issue is incorporating emerging trends into our introductory accounting classes, which will also be the topic of a two-year panel discussion at the annual meeting. By sharing information about new trends, we also let our students know that accounting goes far beyond debits and credits and is a dynamic, innovative discipline. We are grateful for the wonderful contributions from Stacey Whitecotton of Arizona State on sustainability, and Susan Crosson of the American Accounting Association on data trends. They challenge us to prepare our students for an ever-changing accounting career and future.

Our fall issue will center on student success. Does your college or department have a program that has been particularly beneficial? Are you using an engaging classroom technique? Do you have a story to share about making an impact in students’ lives? If so, please considering sharing these in our next edition of *The Communicator* by contacting me at the address below.

I look forward to seeing you at annual meeting in August. Please make plans to attend the Two-Year College luncheon, social event, and sessions.

- Carol

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**Call for Short Articles for the Next Issue**

Anyone wishing to submit short articles, stories, letters to the editor, or other items to TYC – Communicator Newsletter should send the material to:

*The Communicator*

Carol Hughes
Asheville Buncombe Technical Community College
Asheville, NC 28801
828-398-7242
Email: chughes@abtech.edu

Your manuscript should be short (not over two to three pages single spaced). Please submit your manuscript in Word or RTF format.
Big Data Trends
By: Susan Crosson

Keeping courses fresh and interesting for ourselves and our students is our challenge each semester. How can we keep the course in our knowledge comfort zone but updated for the emerging issues engulfing us? Here are a few suggestions and some scary news.

1. “I used to require assignments in Excel, now I require some data visualizations too.” Visual displays of data and dashboards are easy to do with programs like Tableau, Qlik, or Tibco Spotfire. Most are free to academics and include video training, datasets, blogs, data storage space, and lots of examples to leverage in your courses. Try Tableau Public: https://public.tableau.com/s/ to access the free app, free training https://public.tableau.com/en-us/s/resources, free data https://public.tableau.com/en-us/s/resources. A good starting assignment is the “Viz of the Day” https://public.tableau.com/en-us/s/gallery where students can view a gallery of data visualizations and dashboards and also create their own different visualization from the same data set. Or, if your course objective is to use the commercial version of Tableau, contact Emma Trifari at Tableau for free access for you and your students. https://www.tableau.com/academic

2. “I used to require oral reports in class, now I require video presentations.” Besides transferring accounting knowledge, many of us provide soft skill opportunities like making a class presentation where we give students presentation skills feedback. Since it can take up a lot of class time, there has been a trend to shift the assignment to videos since all seem to have a video camera on their phone. Regardless, the objective is to develop student confidence and job readiness. These presentation skills via video are more important than ever as prospective employers are now using artificial intelligence (AI) to do the initial phone and video screening of applicants. AI applies algorithms and controls for biases as it analyzes an applicant’s video for speech, facial expressions, and body language. Become familiar with this trend: HireVue https://www.hirevue.com or VidCruiter https://vidcruiter.com

3. “I used to ask students to write up newspaper articles, now they are key word curators around emerging issues.” Individual students or student teams can learn staying current strategies by searching for Big Data key terms and sharing them in key word threaded discussions or one-minute memos. Key words like: robotic process automation (RPA), artificial intelligence (AI), cognitive technology, or block chain will open future pathways. Or, faculty can assign students to find current articles/information sources for one of the existing short Big Data cases available from either the 2015 or 2016 Accounting IS Big Data Conferences http://aaahq.org/Meetings/2015/Accounting-IS-Big-Data/Program or http://aaahq.org/Meetings/2016/Accounting-IS-Big-Data/Program.

“Many argue that the skills for successful accounting and auditing are likely to be different in the future, and some admit that they will need substantially fewer entry-level accountants in coming years.”

“Remaining jobs in accounting are likely to involve some of the following types of activities:

- Working alongside intelligent accounting machines to monitor their performance and results, and (if possible) to improve performance;
- Overseeing the use of intelligent accounting machines in external and internal audit processes, and determining whether more, less, or different automation tools are necessary;
- Working with accounting firms and vendors to develop new AI-based technologies, and to support existing ones;
- Carrying out tasks that are now impossible with AI-based computers, including cultivating internal and external clients, interpreting audit and financial results for senior managers and boards, and so forth;
- Addressing types of accounting tasks that are so narrow and uncommon that it would be uneconomical to build systems to automate them.” [page 20]

How will you meet these challenges rapidly engulfing accounting programs: Fewer entry-level hires and technology augmented competencies and experience? A good place to start is by attending the Accounting IS Big Data Conference in Brooklyn NY September 7-8, 2017 [http://aaahq.org/Meetings/2017/Accounting-IS-Big-Data-Conference] or attending an Accounting IS Big Data Workshop at one of the 2017-2018 AAA regional meetings.

Susan Crosson is the director of the American Accounting Association’s Center for Advancing Accounting Education.

San Diego Social Event

The Two-Year College section is hosting an informal social event at the 2017 Annual Meeting, where two-year and four-year faculty can meet to discuss common teaching strategies and challenges. Since the two-year college students represent a significant portion of the 4-year institution's enrollment pipeline, let's come together to toast and network in order to gain a better understanding about the TYC transfer student, TYC and 4-year institution programs, effective recruitment methods, articulation agreements, etc. This event will be held on Tuesday evening. Watch for more details in the coming weeks.
Robot Revolution

By: Carol Hughes

“We are at the very beginning of a major disruption in the accounting world that will be as big for the profession as Excel was. Robotics will become an industry standard.” - Steve Palomino, Redwood Software

If the word robot makes you envision Rosie the Maid from The Jetsons, you may need to adjust your image. Robots (bots) have become a part of our everyday lives. If you use Siri, own a smart refrigerator, or call a customer service center, you have interacted with a robot. Today’s bots are not machines with arms and legs. They are simply lines of software code that are configured to capture data, execute sequences, and make decisions in the same way as human beings. It should come as no surprise that we are beginning to see the widespread use of robotic process automation (RPA), a combination of automation and artificial intelligence, in accounting and finance. Think about some of the typical processes an accounts payable clerk performs in a manual system. They receive invoices and classify them into categories, enter the invoice data into software, distribute copies for approval, gather documentation to support a three-way match, and prepare vouchers. RPA performs all of these steps without human involvement.

The use of robotic process automation is very attractive to management. Bots can work 24/7 for 365 days a year, preforming repetitive tasks rapidly, require no salary or benefits are less prone to mistakes, and don’t complain. It is predicted that robotics will automate or eliminate up to 40% or transaction accounting work by 2020 (Axson) and by the year 2025, we will see the decline of 12 million “cubical workers” in the U.S. due to RPA (Forrester Research).

This is of particular concern for two-year college instructors as we supply most of the support and para-professional staff for firms and companies. What skills do our students need to be prepared for a robotic future?

- Information technology expertise. Students still need to be familiar with Excel and QuickBooks, but we must go beyond the basics. We should be working with our information technology colleagues to develop courses that give students exposure to a wide variety of software tools and platforms. We need to consider re-visioning and revising our curriculums to eliminate courses that will be of limited value in the new job market and replace them with those that will give our students future benefit.

- Communication skills. By 2020, cross-functional integrated teams will deliver 80% of traditional financial services (Accenture). Our students need practice in teamwork to learn to effectively collaborate and share ideas. They need to hone their listening skills, which can also
be accomplished through group activities, and they need to be very comfortable making presentations.

- Critical thinking skills. To introduce RPA, I generally show a short excerpt from a RPA vendor video and ask students what they think it will mean to the future of accounting. The first answer is inevitably that the need for accountants will be eliminated. After further discussion however, we arrive at the conclusion that new technology will create new positions and that accountants will play a very different role than they do today. It is estimated that future accountants will spend up to 75% of their time on decision support, predictive analysis, and performance management compared to 25% today (Accenture). The focus will no longer be on historic data, but on real time data, so knowing how to analyze and interpret rapidly will be critical. In addition, RPA uses rules engines so it works well with rule-based activities. However, it is not adept at complex decision-making where creativity is involved, and it lacks the ability to think through difficult issues, so possessing higher level thinking skills will be invaluable.

Like it or not, the robot revolution is in our future, and the future of our students, and it will come faster than we anticipate. Are we ready?

Carol Hughes is an instructor at Asheville Buncombe Technical Community College and a lecturer at the University of North Carolina Asheville.

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<thead>
<tr>
<th>AAA Region Meetings</th>
<th>Location</th>
<th>Dates</th>
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<td><strong>Fall 2017</strong></td>
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<td>2017 Northeast Region Meeting</td>
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<td>2018 Southeast Region Meeting</td>
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<td>2018 Mid Atlantic Meeting</td>
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Two-Year College Schedule 2017 Annual Meeting

Going to the American Accounting Association Annual Meeting in San Diego? Plan on attending the following Two-Year College sessions and our annual lunch meeting. Hope to see you in August!

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<th>AAA Two-Year College 2017 Annual Meeting Sessions</th>
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<tr>
<td><strong>The Future of Learning</strong></td>
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<tr>
<td><strong>Incorporating Emerging Accounting Issues in Introductory Courses</strong></td>
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<tr>
<td>Monday August 7, 2017 2:00 pm-3:30 pm</td>
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<tr>
<td><strong>Enhancing Today's Classroom Utilizing Technology</strong></td>
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<tr>
<td>Monday August 7, 2017 4:00 pm-5:30 pm</td>
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<tr>
<td><strong>Best Practices in Online Teaching</strong></td>
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<tr>
<td>Tuesday August 8, 2017 10:15 am-11:45 am</td>
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<tr>
<td><strong>No-Tech Tips and Tricks to Create an Interactive and Engaging Classroom</strong></td>
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<tr>
<td>Tuesday August 8, 2017 2:00 pm-3:30 pm</td>
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<tr>
<td><strong>QuickBooks: Best Teaching Practices, Accreditation, Certification</strong></td>
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<tr>
<td>Tuesday August 8, 2017 4:00 pm-5:30 pm</td>
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<tr>
<td><strong>Student Retention, Transfer and Success</strong></td>
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<tr>
<td>Wednesday August 9, 2017 10:15 am-11:45 am</td>
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<tr>
<td><strong>Two-Year College Section Luncheon with Business Meeting</strong></td>
</tr>
<tr>
<td>Monday, August 7, 2017 (12:00 pm – 1:45 pm) (Ticket required for lunch)</td>
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TWO-YEAR COLLEGE AAA MEMBERSHIP

The AAA offers membership for any fulltime faculty member who teaches at a Two-Year College. This one-year membership features reduced dues in the AAA and includes an electronic subscription to all three AAA online journals: *The Accounting Review*, *Accounting Horizons*, and *Issues in Accounting Education*. All electronic journals are searchable and downloadable through the Digital Library. Further information and membership and section sign-up is available at [http://aaahq.org/Membership/type/Member-Application-for-Two-Year-College-Faculty](http://aaahq.org/Membership/type/Member-Application-for-Two-Year-College-Faculty) or you may fill out the form below and return it to American Accounting Association, 9009 Town Center Parkway, Lakewood Ranch, FL 34202.

GIVE THE FORM BELOW TO COLLEAGUES AND ENCOURAGE THEM TO JOIN!

Membership Application for the Two-Year College Section

ID#  
Name:______________________________________________________________________________
Address:______________________________________________________________________________

Affiliation:  
Telephone: Office __________________ Home __________________ Fax__________________________
Annual AAA Membership: $75  Section Dues: $10
Payment method: ___ Check enclosed (make payable to AAA) ___ VISA
MasterCard Billing Address:________________________________________________________________________
Account Number: ____________________________________________ Expiration date:__________
Signature:________________________________________________________________________