Resources to Create an Engaging Introductory Accounting Class

Karen Braun, Case Western Reserve University
Wendy Tietz, Kent State University

Part I-
- Motivating students to prepare for class
- Providing learning experiences that engage students and prepare them for employment
  - Active learning versus passive learning
  - Excel skills
  - Critical thinking skills

Part II-
- Keeping students engaged and accountable
  - Learning Catalytics
  - Connecting to the real world
    - Accounting in the Headlines
    - Serial case
- How to get students to prepare? (the “Danielle problem”)
  - Digestible-size reading assignments
  - Quiz over reading
    - Use password protected quiz in MAL
    - First 5 minutes of class
    - Open note
    - 3 conceptual multiple choice questions
  - Note-taking
    - Free-form notes
    - Directed reading

Directed Reading Guides
- Keeps students actively engaged while reading
- Follows the chapter paragraph-by-paragraph
- Optional, but most Fall 2016 students used them (“Did you use the DR guides on a regular basis?”:
  - Yes = 58.3%
  - No = 15%
  - Sometimes used them = 26.7%
Student feedback

Why did students use them?
- Preparation/motivation
- Reoccurring themes:
  - Extracting the most important information
  - Better comprehension
  - Study aid for quizzes and exams

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Preparation/Motivation

- "They almost forced me to do the reading. I knew that I had to set aside time to do them so I could fill out the packet and not just skim the chapter and jot down a few notes. They kept me in line and I never missed a reading because of them."
- "They make me actually read the book and give me the motivation to do so. Without the directed reading packets I would take notes but I don't think I would do a great job or do it for every single chapter."
- "They really made me read the chapter before class which was helpful during the lecture. They were pretty thorough and straightforward which helped me learn the material and is also why I enjoyed doing them."

Extracting the most important information:

- "I used them to make sure that I was interacting with the material. As well as I got to see what you thought was important. It's sometimes hard to see what was important when you are exposed to so much new content."
- "Guided reading= I know what you want me know. Takes the uncertainty out of reading a chapter"
- "They helped me focus on the key points of the chapter."
- "Filter out the less important information and only focus on the important points."

Better Comprehension

- "Helped comprehend the reading better"
- "It is the most convenient way for students to establish their own memory and understanding of the concepts, which is the most crucial component of the whole learning processing. I’m actually surprised by just how few faculty members use the same approach. It should be recommended to all of them"
- "I thought they were great at first, but they are very time consuming which made it difficult to do consistently. The chapters I did directed readings for I felt I knew the best though.”

Study aid for exams and quizzes

- "I used them to study for tests"
- "As an easy reference for what I might need to know for the quiz, and to have another source to review from before tests"
- "They were very useful for the quizzes and for the beginning of studying for exams. They were a great way to get all the important info from the chapters into a concise format and gave a great starting point for studying for exams."

Potential drawbacks?

- Copying from another student? (Doesn’t change between semesters)
- "Reader’s Digest Condensed Version" for students who didn’t read the chapter? (My opinion: Something is better than nothing)
Thoughts? Questions?
- Other ways to use? (e.g. in lieu of quiz)
- Other tactics for getting students to prepare for class or helping them prepare for class?

What to do in class once they have a basic understanding?
- Deeper dive into the material
- Discussions
- Problems
- Cases
- Projects

Excel-based projects
- Winner of the 2016 Bea Sanders/AICPA Teaching Innovation Award
- Active-learning on 7 core managerial acctg topics:
  - Job costing
  - Process costing
  - Cost behavior
  - CVP (will be class tested this spring)
  - Budgeting
  - Flexible budgeting
  - Division Performance evaluation

Projects and Solutions
- Available to anyone who is interested in using them
- Currently on a non-searchable Google site:
  sites.google.com/case.edu/karenbraunexcelprojects

Why?
- Student learning and engagement
  Students learn best through active engagement vs. passive learning
- Internships and Employment
  Employers want and expect Excel skills
- AICPA Functional Core Competency
  “Leverage Technology to Develop and Enhance Functional Competencies”
- AACSB Accreditation Standard A7
  “Include learning experiences that develop skills...related to...effectively utilizing technology”
- New CPA Exam
  More task based simulations; fewer multiple choice
Introductory Managerial Course: Apply & Analyze

Bloom’s Taxonomy

- **Create**
  - Formulate new or original work
  - Write a story, poem, essay, play, scientific paper, business report

- **Evaluate**
  - Analyze, critique, synthesize, evaluate
  - Examine and make a decision
  - Evaluate, appraise, judge, select, revise, evaluate

- **Analyze**
  - Evaluate, analyze
  - Compare, contrast, distinguish
  - Differentiate

- **Apply**
  - Apply to a new situation
  - Demonstrate
  - Use information in new situations
  - Make judgments

- **Understand**
  - Describe, explain, interpret, simplify
  - Clarify

- **Remember**
  - Recall facts and basic concepts
  - Remember

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Student Feedback collected on each project

- Extremely positive
- 90% - 96% say “keep using in future semesters”
- Rated 4.0-4.7 as a “useful learning experience”

![Thumbs Up Image](image)

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Student comments

- “It was like we were really doing it in real life”
- “Real hands-on experience”
- “Helped me learn Excel”
- “Helped reinforce the material”
- “Helped me apply what we learned in class and understand the material better”
- “The projects helped a lot and showed real life scenarios”
- “They were fun”

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Specifications

- About 75 minutes each
- In-class OR outside of class
- Individual OR with a partner
- Class tested several semesters (except CVP)
- No Excel experience necessary
- Grading rubrics for each

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Sample of Directions

**Part 1:** Scatter plot, regression line, and high-low line using the number of days

- Highlight all of the values and our data with the mouse.
- Click on the “insert” tab on the main bar and then choose “scatter” as the chart type. Next, click the “plains scatter graph” (without any trend). Then, draw the scatter graph as the page. Click on “Move chart location” as needed to move the chart to a new sheet (so that it’s nice and big).

- Click on “Quick Layout” on the toolbar and choose “layout a.” Add a descriptive title for the scatter plot and appropriate labels to the axes by clicking on the Chart Title and Axis Title and typing in your own title. Delete the “Series a” legend by right-clicking on it and then deleting.

- Identify any data points you think are outliers by pointing to them with an arrow using the “insert” (on the menu bar) tool and “shapes” on the toolbar. Use the “insert” (on the menu bar) tool and “text” (on the toolbar) to label the possible outlier(s) or to comment that none appear to exist. Even if you see potential outliers, continue to use the full data set in the following analysis.

- To add the regression equation, place your pointer on any data point on the graph and RIGHT click the mouse. Choose “Add Trendline,” choose “linear” (the default). To add the regression equation and R squared value, also now “Display the equation on the chart” and “Display the R-squared value on the chart.” Drag and drop the equation and r-squared to a suitable location on the graph.
Job Costing

- **GOAL:** Deepen understanding of job costing process using actual documents.
- Starts with customer order for 7 handbags
- Take it through production & sale
- Critical thinking questions
- Hard copy (Word) or Excel
- Journal entries at end; optional

Sample (See handout or Google site)

- Sample is “hard copy” version. Excel version has all documents in an Excel file.

Additional analysis

- Use product cost information to
  - value inventory
  - create the company’s income statement for the period

- Show how a change in the estimated percentage of completion affects
  - inventory
  - operating income

Process Costing

- **Goal:** Demonstrate how process costing is used to determine product cost, value inventory, and CGS.
- Students given
  - a production cost report template
  - journal entries for the period
  - client story
  - Format the template
  - Use client-specific information to find the product’s cost

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Cost behavior

- **Goal**: Learn to analyze cost behavior through scatterplots and regression analysis
- Given historical data for a limousine service on
  - Operating costs
  - Trips taken
  - Miles driven
- Create scatter plots and look for outliers
- Insert and compare High-low line and regression lines
- Compare high-low and regression cost equations
- Interpret R-square
- Decision: Which cost driver would be best for future cost estimates? Why?

CVP Analysis

- **Goal**: Create a reusable CVP model for an entrepreneur of a two-product business
- Includes breakeven analysis, pro forma income statement, margin of safety, and operating leverage
- Analyze effect of changing business conditions

Personal Budget

- **GOAL**: Engage students in the budgeting process (researching and estimating costs, making allocation decisions, calculating taxes, making budget cuts, etc.)
- Decide where you want to live
- Research starting salaries, apartments, etc.
- Direction packet walks students through FICA, local, state, and federal income taxes
- Excel template with cost categories provided; they have to insert formulas
- Cost containment ideas for 5 or more areas
- Compare/contrast business and personal budgeting
Flexible Budgeting

• GOAL: Create a flexible budget performance report that can be used to assess management’s assertions
• Create a master budget and flexible budget such that any change to assumptions will ripple through the budget properly
• Use “if/then” statements to label variances as U or F
• Identify significant variances and brainstorm about what could have caused them
• Determine whether management’s story is consistent with the variances

Segment Performance Evaluation

• Goal: Locate segment information in a company 10K and use it to evaluate and compare the financial performance of each segment.
• Start with a blank Excel worksheet
• Learn how 10Ks are organized; locate correct footnote disclosure
• Create tables and graphs to compare segment performance
• Offer suggestions on how the segment manager improve ROI, sales margin, and capital turnover.
• Make a capital allocation decision

Questions?
Feel free to contact me.

• Karen.braun@case.edu
sites.google.com/case.edu/karenbraunexcelprojects

Thank you!!!