



# Excel-Based Active-Learning for the Managerial Accounting Course

Karen W. Braun, PhD, CPA, CGMA  
Professor of Accountancy  
Weatherhead School of Management  
Case Western Reserve University





# Excel-based projects

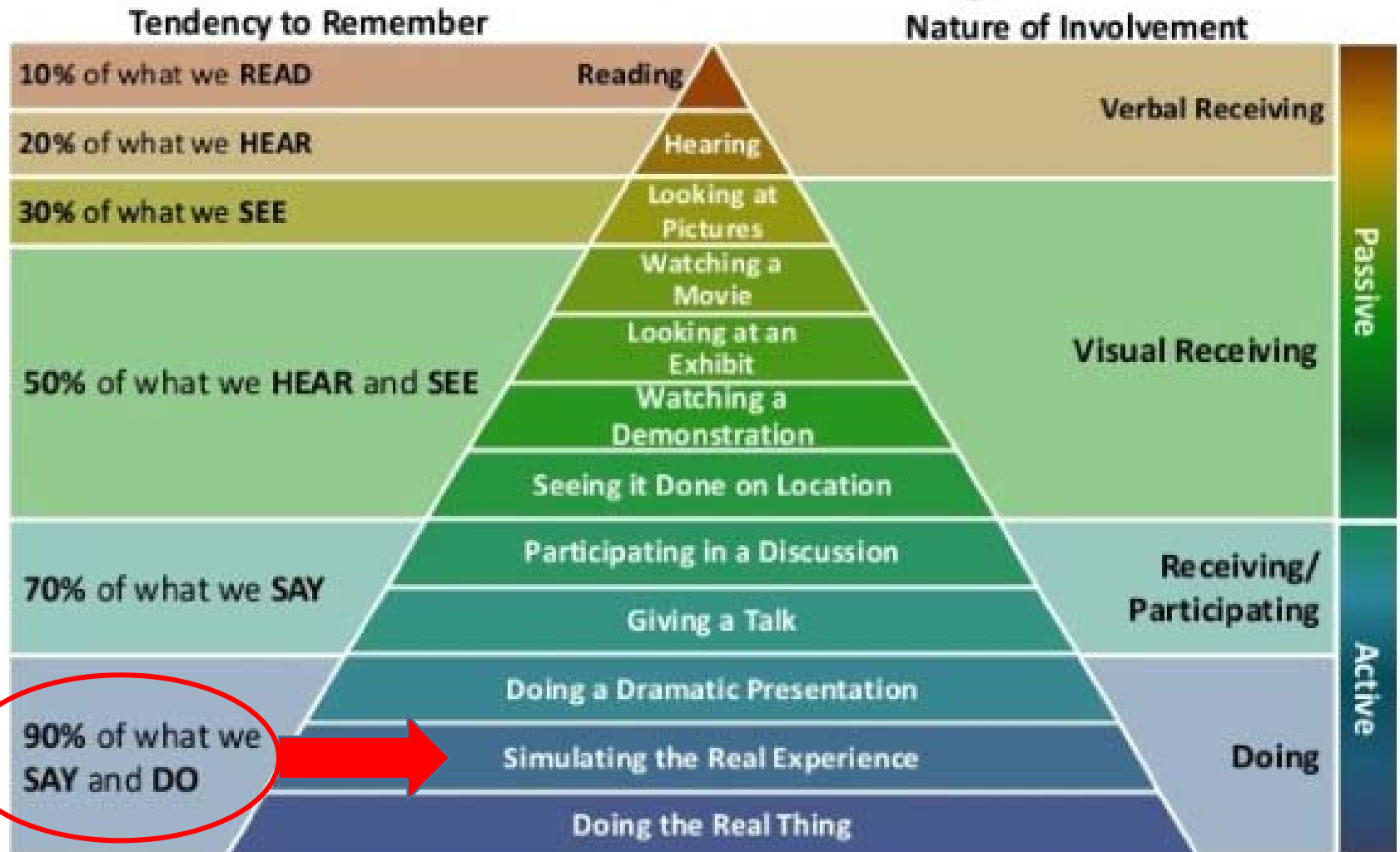
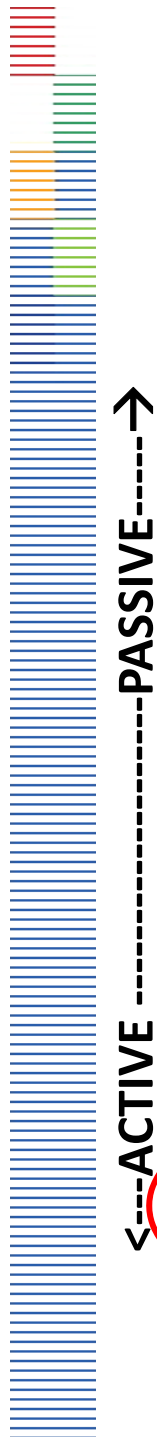
- Goals: Engage students, deepen understanding, and improve Excel skills
- Business simulations
  - Generate information from data
  - Use for decision making
  - Each self-paced project is independent of the others
- Active-learning on seven core topics:
  - Job costing
  - Process costing
  - Cost behavior
  - CVP
  - Budgeting
  - Flexible budgeting
  - Division Performance evaluation



Excel


# Dale Edgar's Cone of Learning

"I see and I forget.  
I hear and I remember.  
I do and I understand."  
– Confucius



Infographic published by Neil Beyersdorf  
[linkedin.com/in/neilbeyersdorf](https://www.linkedin.com/in/neilbeyersdorf)

"Seeing is believing, doing is knowing." – Neil Beyersdorf

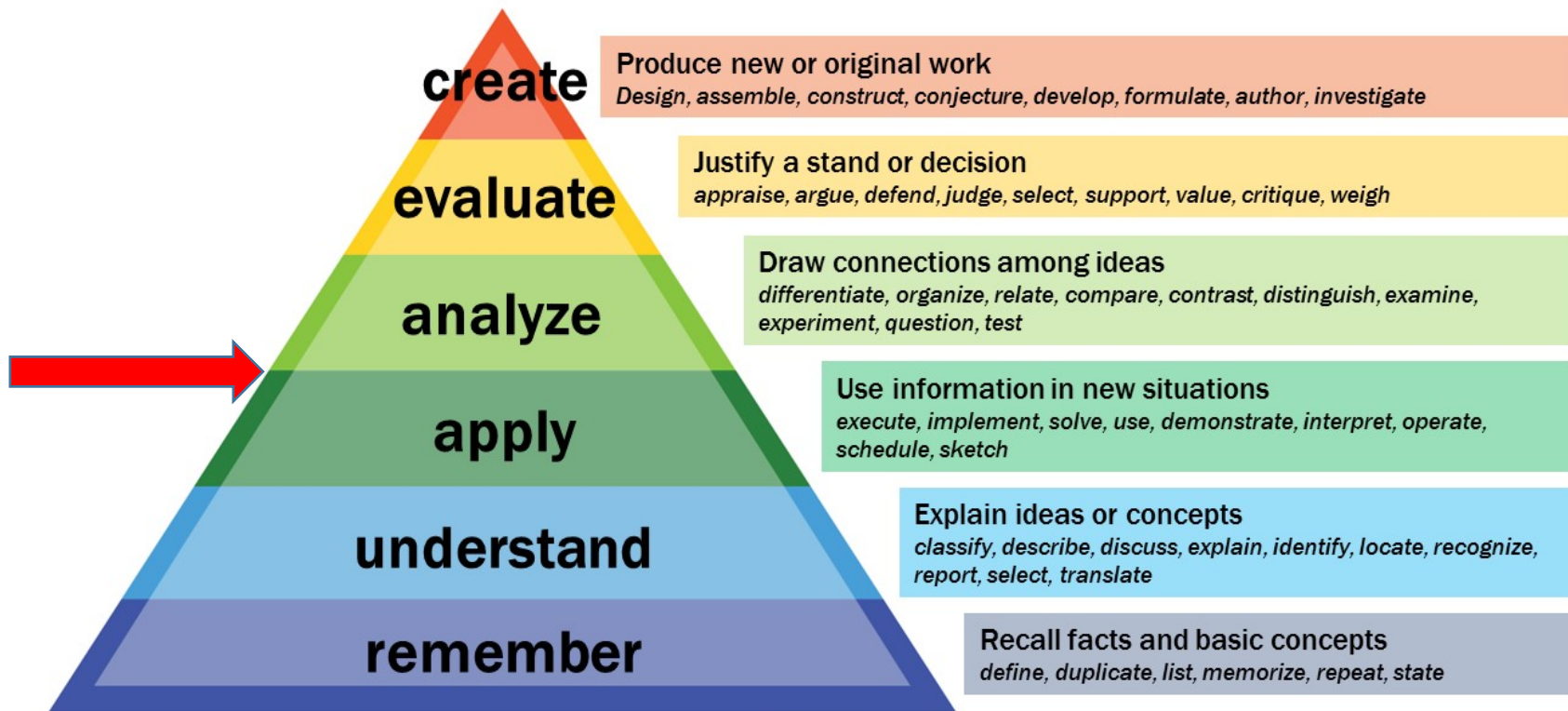


# Why?

- **Student learning and engagement**
  - *Students learn best through active engagement*
  - *Students enjoy moving at their own pace*
- **Internships and Employment**
  - *Employers want and expect Excel skills*
  - *Not too early to start with freshman and sophomores*
- **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

## Bloom's Taxonomy





# AICPA Core Competency

- **“Leverage Technology to Develop and Enhance Functional Competencies”**

“Technology is pervasive in the accounting profession. Individuals entering the accounting profession must acquire the necessary skills to use technology tools effectively and efficiently. These technology tools can be used both to develop and apply other functional competencies.”



# IMA Competency Framework

- *“Use technology to solve problems, analyze data, and enhance business performance”*

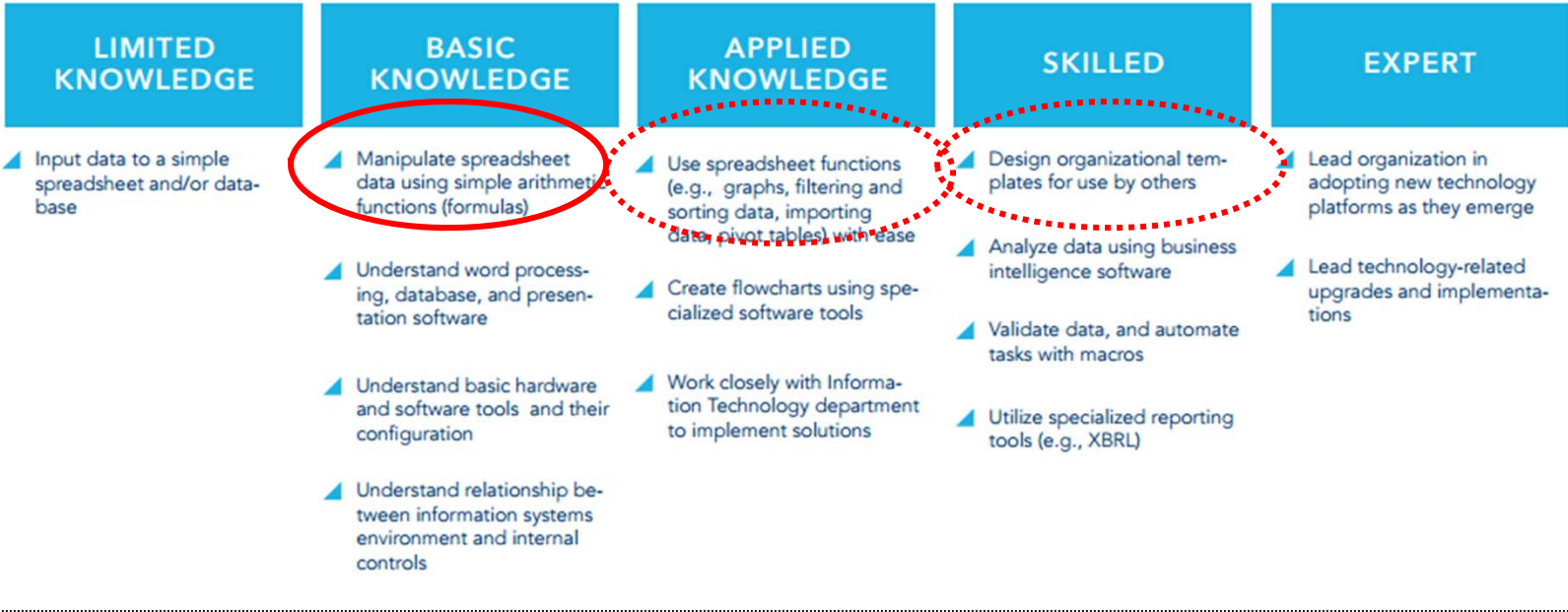


# IMA-Technology Competency

## INFORMATION SYSTEMS AND SOFTWARE LITERACY

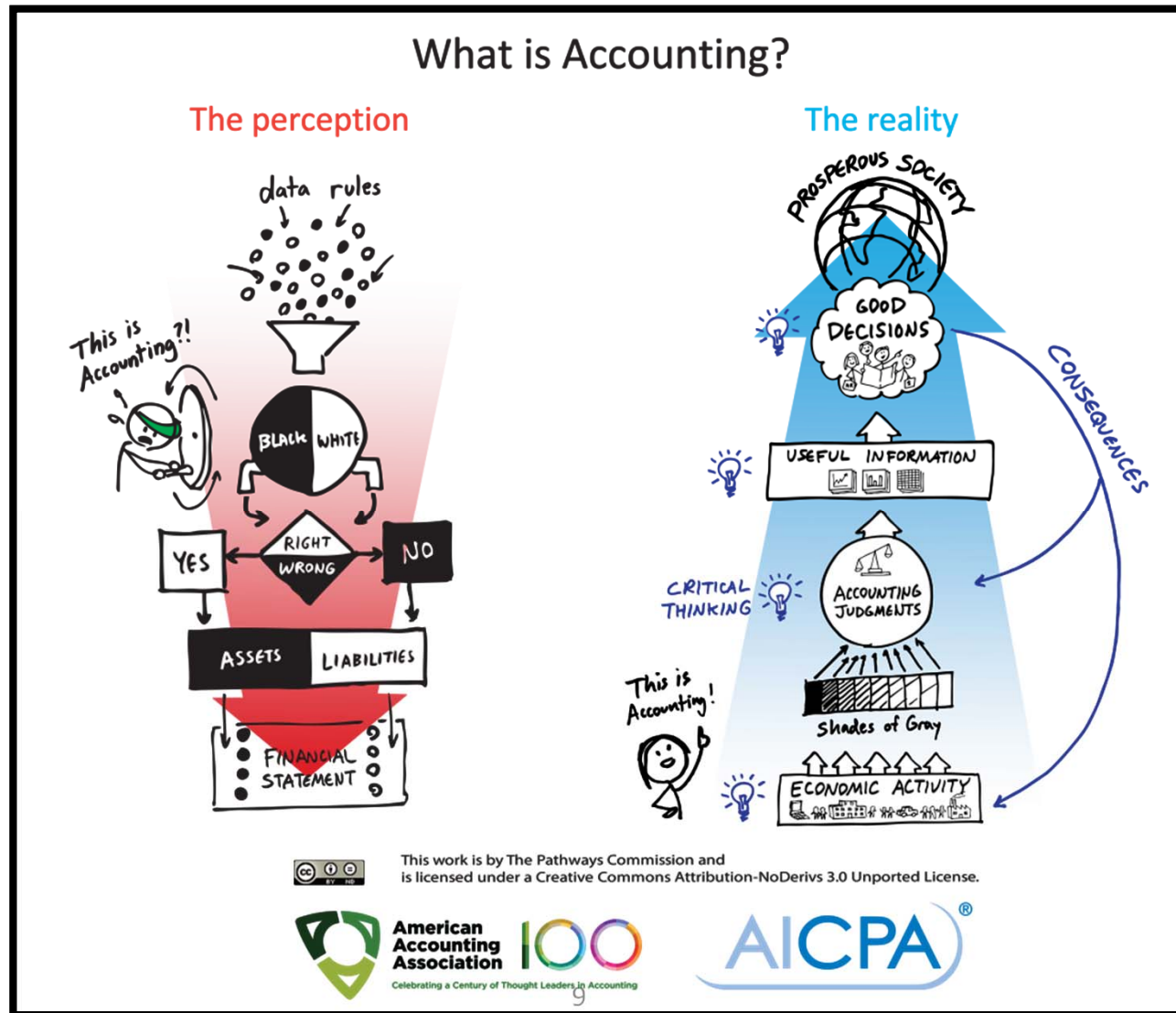
ENABLING

Use technology to solve problems, analyze data, and enhance business performance





# Consistent with AAA Vision Model



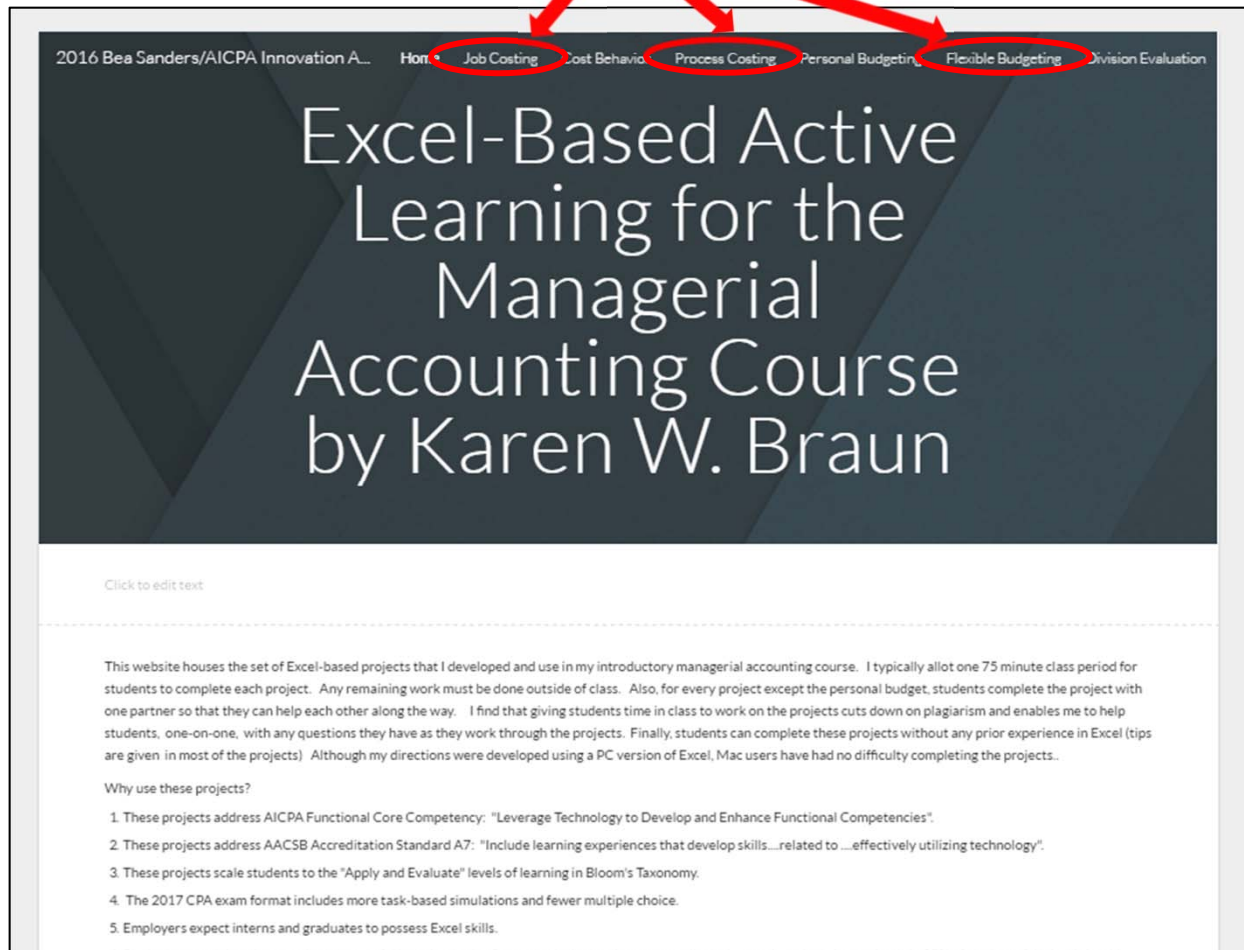


# Projects, Solutions and Rubrics

- Available to anyone who is interested in using them
- Currently on a non-searchable Google site
- Download project materials *and* suggested solutions
- In Excel and Word so that you can change as you wish
- DON'T give site URL to students

[sites.google.com/case.edu/karenbraunexcelprojects](https://sites.google.com/case.edu/karenbraunexcelprojects)

# Projects along top of homepage



The screenshot shows a website homepage with a dark blue header. At the top left, the text reads "2016 Bea Sanders/AICPA Innovation A...". To the right of this is a navigation menu with several items: "Home", "Job Costing", "Cost Behavior", "Process Costing", "Personal Budgeting", "Flexible Budgeting", and "Division Evaluation". Red arrows point from the top of the page to the "Job Costing", "Process Costing", and "Flexible Budgeting" links, which are also circled in red. Below the navigation menu is a large white text area with the title "Excel-Based Active Learning for the Managerial Accounting Course by Karen W. Braun". Below this is a section titled "Click to edit text" followed by a paragraph of text describing the website's purpose and a list of reasons for using these projects.

2016 Bea Sanders/AICPA Innovation A... Home Job Costing Cost Behavior Process Costing Personal Budgeting Flexible Budgeting Division Evaluation

## Excel-Based Active Learning for the Managerial Accounting Course by Karen W. Braun

Click to edit text

This website houses the set of Excel-based projects that I developed and use in my introductory managerial accounting course. I typically allot one 75 minute class period for students to complete each project. Any remaining work must be done outside of class. Also, for every project except the personal budget, students complete the project with one partner so that they can help each other along the way. I find that giving students time in class to work on the projects cuts down on plagiarism and enables me to help students, one-on-one, with any questions they have as they work through the projects. Finally, students can complete these projects without any prior experience in Excel (tips are given in most of the projects) Although my directions were developed using a PC version of Excel, Mac users have had no difficulty completing the projects.

Why use these projects?

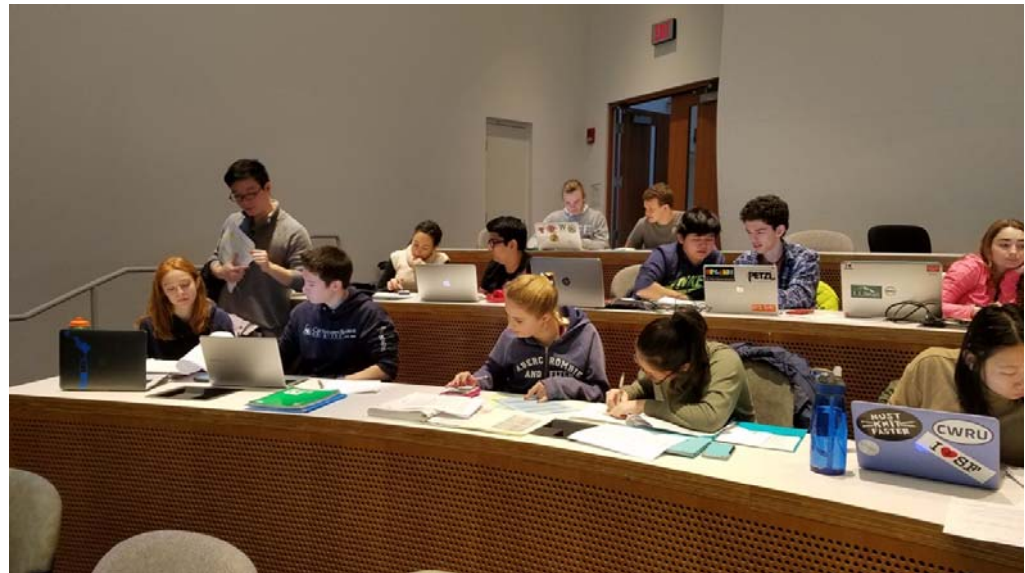
1. These projects address AICPA Functional Core Competency: "Leverage Technology to Develop and Enhance Functional Competencies".
2. These projects address AACSB Accreditation Standard A7: "Include learning experiences that develop skills...related to ...effectively utilizing technology".
3. These projects scale students to the "Apply and Evaluate" levels of learning in Bloom's Taxonomy.
4. The 2017 CPA exam format includes more task-based simulations and fewer multiple choice.
5. Employers expect interns and graduates to possess Excel skills.

# Overview: August 2017 edition



# Student Feedback Collected on Each Project

- Extremely positive
  - 90% - 96% say “keep using in future semesters”
  - Rated 4.0-4.7 out of 5 as a “useful learning experience”
  - One of the “most memorable” parts of the course






# Student Comments

- “The projects helped me understand the topics we covered and made it easy to see the real life application”
- “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 to do and I learned a lot”

# Specifications

- Learning experience vs. assessment
- In-class OR outside of class
- Individual OR with a partner
- About 75 minutes each
- Class tested several semesters (except CVP)
- No Excel experience necessary
- Check figures imbedded in some
- PC or Mac
- Different Excel versions OK
- Excel (not Google Sheets)





# Polling Question 1

How well do most of your introductory managerial accounting students know Excel?

- a) Most have never used it
- b) Most have had a little experience with it
- c) Most are moderately proficient at it
- d) Most are extremely proficient at it





# Getting started: Basic operations

## EXCEL HINTS

- "Copy and paste" as much as possible rather than typing in numbers already on one of the spreadsheets (for example, some of the cost data in the general ledger).

-An easy way to make a cell reference is type an = sign and then highlight the cell you want to put in (rather than typing it).

To multiply, use \*

To divide, use /

To add, use +

To subtract, use -

-Make use of the AutoSum button for adding cells together.

-Use "Paste Special- Values" if what you are pasting is the result of a formula and you only want the number copied rather than the formula.

# Sample of imbedded Excel hints

The image shows a portion of an Excel spreadsheet with a grid. At the top, there is a text box containing an Excel hint: "EXCELHINT: To copy an entire worksheet, right click on the worksheet tab at the bottom of the screen and choose 'Move or Copy'. Then check the 'create a copy' box. Once you have the copy, choose 'rename'." A red arrow points from this hint box to the "NEW" worksheet tab at the bottom of the screen.

Below the hint box, the text "siness." and "a to the" is visible in a cell. To the right, another text box contains a second Excel hint: "EXCELHINT: To copy a cell from a different worksheet, put a + in the cell where you want the number to go, and then go back to the original worksheet, put your cursor on the cell, and then press enter." A red arrow points from this hint box to the "ORIGINAL" worksheet tab at the bottom of the screen.

At the bottom of the spreadsheet, three worksheet tabs are visible: "NEW", "ORIGINAL", and "Change".



# Sample of Directions for cost behavior

## Part 2: Scatter plot, regression line and high-low line using the *number of trips*

- Highlight all of the volume and cost data with the cursor.
- Click on the “**insert**” tab on the menu bar and then choose “**Scatter**” as the chart type. Next, click the **plain scatter plot** (without any lines). You’ll now see the scatterplot on the page. Click on “**Move chart location**” on the toolbar 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 1**.” Add a descriptive title for the scatterplot and appropriate labels for each axis by clicking on the **Chart Title** and **Axis Titles** and typing in your own titles. **Delete the “Series 1” 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) and “**shapes**” on the toolbar. Use the “**insert**” (on the menu bar) and “**textbox**” (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 line, 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  $R^2$  value, also choose “**Display the equation on the chart**” and “**Display the R-squared value on the chart.**” Drag and drop the equation and r-square to a suitable location on the graph<sup>19</sup>

# Forming good habits...assumptions

A	B	C	D
1			
2	ASSUMPTIONS		
3	<b>Product #1:</b>	<b>Launch-it</b>	
4	Sales price per unit		
5	Variable costs per unit:		
6			
7			
8			
9	Total variable cost per unit		
10			
11	Monthly volume		
12			
13	<b>Product #2:</b>	<b>Treat-Time</b>	
14	Sales price per unit		
15	Variable costs per unit:		
16			
17			
18			
19	Total variable cost per unit		
20			
21	Monthly volume		
22			
23	Fixed costs per month:		
24			
25			
26	Total fixed costs per month		
27			
28	Target profit per month		
29			
30	Expected change in volume (%)		
31			

Business & Directions | Starting file | Original Assump

Ready

Ask me anything

# Helping each other learn- (Mac too)



# 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
- Excel or Hard copy (Word docs)
- Journal entries at end: optional





# 21 Guided Requirements

- Determine optimal batch size
- Schedule production (resource availability)
- Analyze overhead and compute MOH rate
- Determine RM to be ordered & place purchase orders
- Requisition DM (FIFO)
- Determine DL from labor time records
- Complete job cost record
- Compute gross profit on sale of units
- Critical thinking questions- use of different allocation bases, LIFO vs. FIFO, age of equipment, how to reduce costs, competitor's price, etc.
- Journal entries (optional)



# Excel Workbook Includes:

- Customer order form
- Estimated annual costs (must sort out MOH)
- Bill of materials
- Production schedule
- Raw materials records
- Purchase orders
- Authorized suppliers' price lists
- Materials requisition
- Labor time records
- Job cost record





# Screenshot of Raw Materials Records

O35											
A	B	C	D	E	F	G	H	I	J	K	
<b>Raw Materials Record</b>											
Item No. <u>BWFF</u> Description: <u>Black and White Floral Fabric</u>											
Received				Used				Balance			
Date	Units (yards)	Cost	Total	Requisition Number	Units (yards)	Cost	Total	Units (yards)	Cost	Total	
1-Oct								6	\$6.00	\$ 36.00	
<b>Raw Materials Record</b>											
Item No. <u>BWCheck</u> Description: <u>Black &amp; White Checkered Fabric</u>											
Received				Used				Balance			
Date	Units (yards)	Cost	Total	Requisition Number	Units (yards)	Cost	Total	Units (yards)	Cost	Total	
1-Oct								20	\$8.00	\$160.00	
3-Oct				#6784	12	\$8.00	\$96.00	8	\$8.00	\$64.00	
<b>Raw Materials Record</b>											
Item No. <u>BFringe</u> Description: <u>Black Fringe Trim</u>											
Received				Used				Balance			
Date	Units	Cost	Total	Requisition	Units	Cost	Total	Units	Cost	Total	

# Screenshot of Job Cost Record

G17			
A	B	C	D
1	<b>Job Cost Record</b>		
2	Job Number: _____		
3	Customer or Stock: _____		
4	Job description: _____		
5	Date Started: _____ Date Completed: _____		
6	Quantity: _____		
7	<b>Manufacturing Cost Information:</b>		<b>Cost Summary</b>
8	<b>Direct Materials</b> (list Materials Requisition # and cost)		\$
9			
10			
11			
12	<b>Direct Labor</b> (list labor time record #, hours, and cost)		\$
13			
14			
15			
16			
17			
18	<b>Manufacturing Overhead</b> (show calculation of amount allocated)		\$
19			
20			
21			
22	<b>Total Job Cost</b>		\$
23	<b>Number of units</b>		
24	<b>Cost per Unit</b>		\$
25			
26	<b>Shipping Information:</b>		
27	Date	Quantity shipped	Units remaining
28			Cost Balance in Inventory
29			
30			



# Process Costing

- **Goal: Demonstrate how process costing is used to determine product cost, value inventory, and calculate 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
- Additional analysis

# Screenshot of Template


Fall 2016 process costing file for students to download - Microsoft Excel non-commercial use

Department Data		Production Cost Report: Blending Department				
Information about units:		FLOW OF UNITS		Physical Units	DM EU	Conversion EU
Units in Beginning WIP		Units to account for:				
Started during month		Beginning work in process				
Units in Ending WIP		Started in production				
		<b>Total units to account for</b>				
Percentage of completion:		Units accounted for:				
Direct materials		Completed and transferred out				
Conversion		Ending WIP				
		<b>Total units accounted for</b>				
Costs in Beginning WIP		FLOW OF COSTS		Total	DM	Conversion
DM in beginning WIP		Costs to account for:				
Conversion costs in beginning WIP		Beginning work in process				
		Costs added during month				
		<b>Total costs to account for</b>				
Cost information for the current month:		Cost per equivalent unit				
DM traced to Dept during the month		Costs accounted for:				
DL traced to Dept during the month		Completed and transferred out				
MOH allocated to dept during the month		Ending WIP				
		<b>Total costs accounted for</b>				



# 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



## Polling Question 2

Does your undergraduate accounting program require students to take an Excel course?

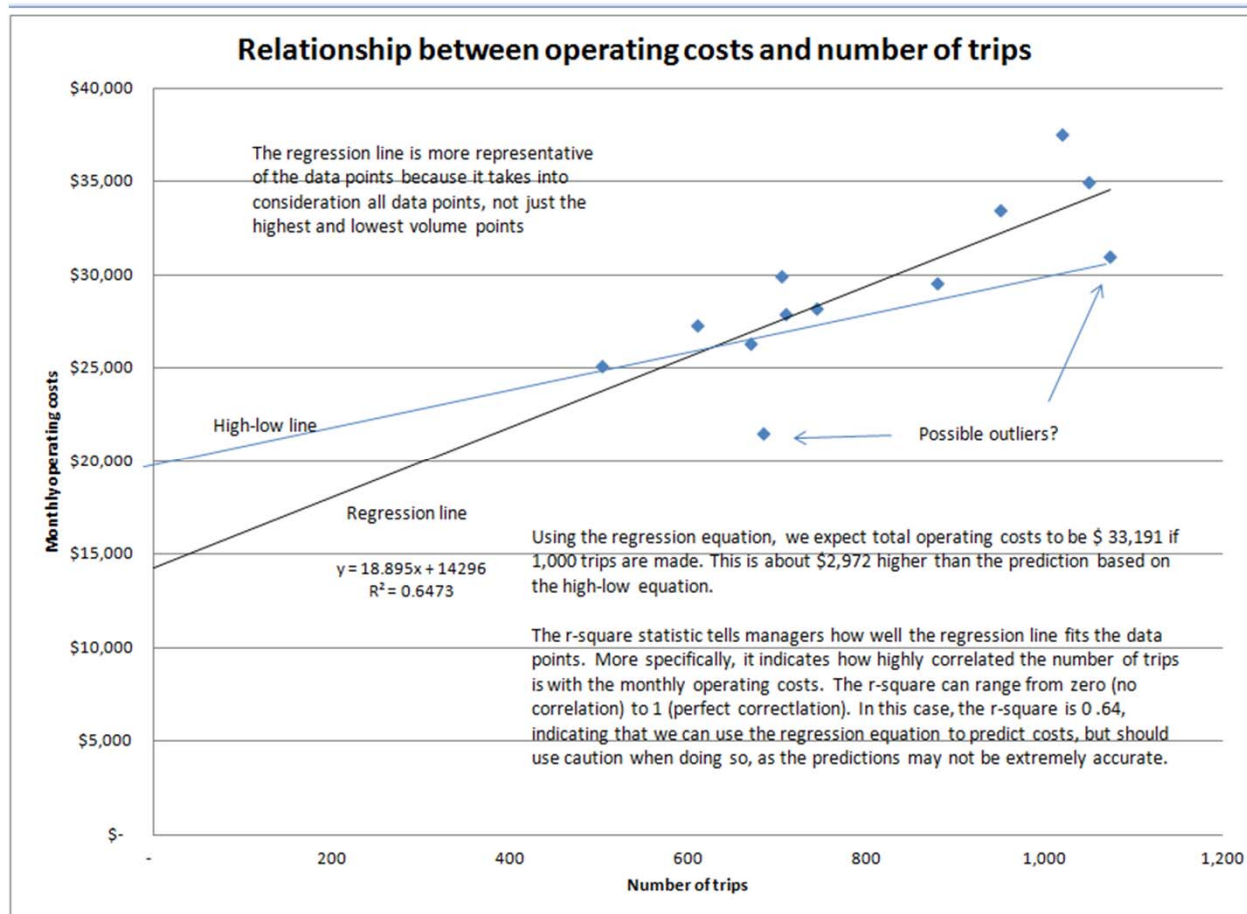
- a) Yes, it is a major requirement offered by our department
- b) Yes, it is a major requirement but it's taught in a different department
- c) No, it is an optional course
- d) No, our school does not offer a stand-alone course in Excel



# Cost Behavior

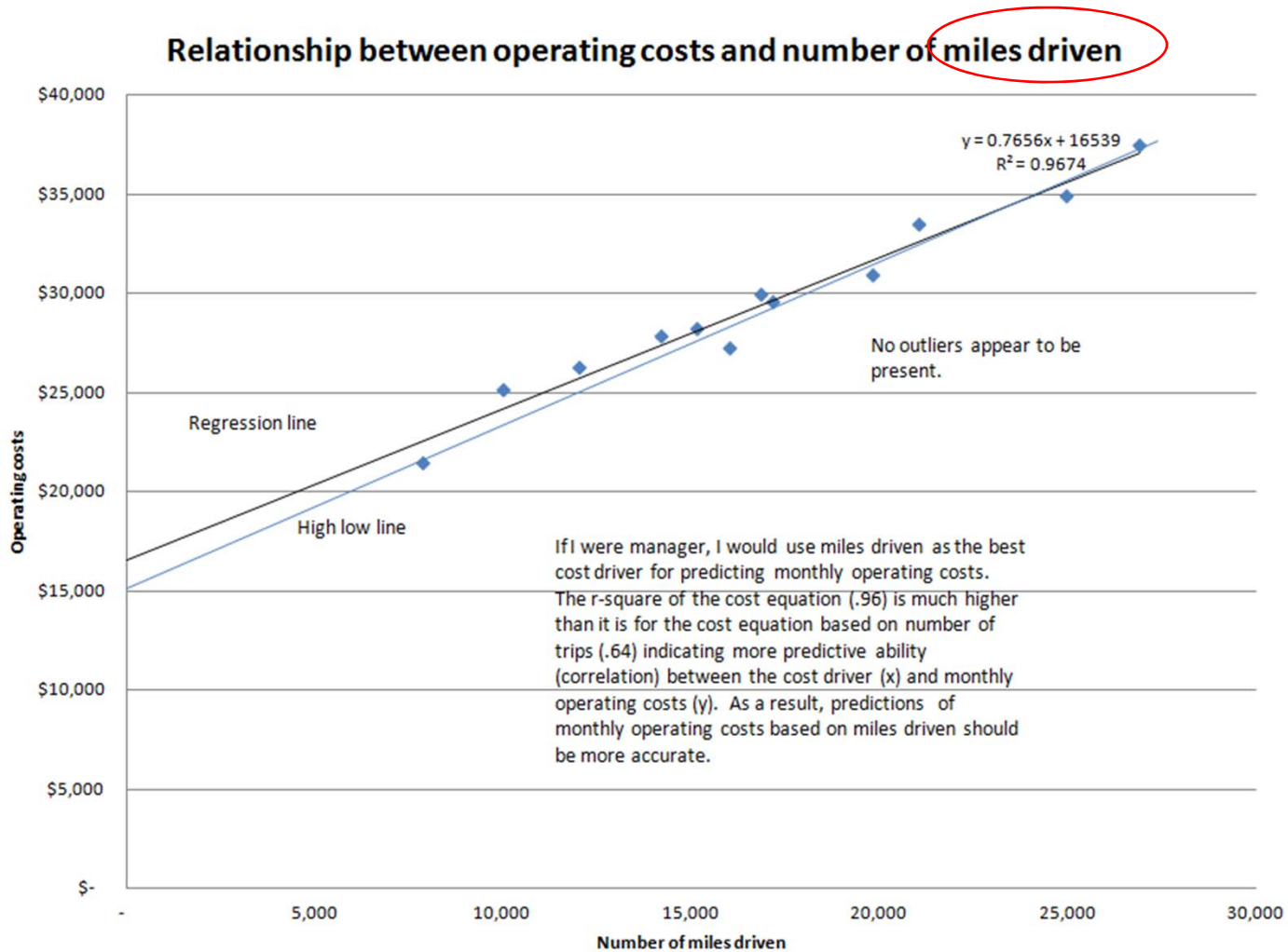
- **Goal: Learn to analyze cost behavior through scatterplots and regression analysis**
- Given historical data for a limousine service on
  - Operating costs
  - Trips taken (first potential cost driver)
  - Miles driven (second potential cost driver)
- Create scatter plots and look for outliers
- Insert 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?

# Screenshot of Completed Project- trips





# Screenshot of project- miles driven



# CVP Analysis- Jake's Pet Supplies

- **Goal: Create a reusable CVP model for an entrepreneur starting a two- product business**
- Includes breakeven analysis, pro forma income statement, WACM, margin of safety, operating leverage factor, etc.
- Analyze effects of changing business conditions





# Business Description

- Two products
- Must sort out fixed and variable costs
- Employee salary + % commission
- Shipping, trade show entry fees, inventory
- Target income; expected sales growth
- Formatting conventions
- Actual sales for one month

# Starting file- (check figures given)

	A	B	C	D	E	F	G	H	I	J	K			
1														
2		<b>ASSUMPTIONS</b>			<b>Product #1</b>	<b>Launch-it</b>		Jake's Pet Supplies Pro Forma Contribution Margin Income Statement For the month ending June 30						
3		<b>Product #1:</b>	<b>Launch-it</b>		Unit CM									
4		Sales price per unit			CM %									
5		Variable costs per unit:			Breakeven point:									
6					-in units									
7					-in sales revenue									
8														
9		Total variable cost per unit			Target profit volume:									
10					-in units									
11		Monthly volume			-in sales revenue									
12														
13		<b>Product #2:</b>	<b>Treat-Time</b>					WACM %						
14		Sales price per unit			<b>Product #2</b>	<b>Treat-time</b>								
15		Variable costs per unit:			Unit CM									
16					CM %									
17					Breakeven point:			Calculation of Weighted average CM per unit						
18					-in units									
19		Total variable cost per unit			-in sales revenue									
20														
21		Monthly volume			Target profit volume:									
22					-in units			WACM/unit						
23		Fixed costs per month:			-in sales revenue									
24														
25														
26		Total fixed costs per month						Multiproduct Breakeven point:	<b>Product #1</b>	<b>Product #2</b>	<b>Total</b>			
27								-in units						
28		Target profit per month						Sales revenue at breakeven						
29														
30		Expected change in volume (%)						Multiproduct Target profit point:	<b>Product #1</b>	<b>Product #2</b>	<b>Total</b>			
31								-in units						

# Screenshot of "Advising the client"

EXCELHINT: To copy an entire worksheet, right click on the worksheet tab at the bottom of the screen and choose "Move or Copy". Then check the "create a copy" box. Once you have the copy, choose "rename".

Jake's questions about his business. I comparisons should be made to the spreadsheet called "supplier cost" where the cost of the products by 20%. What is the new WACM percentage? What is the new MOS%?

spreadsheet called "new sales mix". What is the new operating income? What is the new WACM/unit? How many units (in total) will be sold? Briefly explain your findings to the client.

spreadsheet called "alternative work contract". What is the new operating income? What is the new operating leverage factor? What is the new operating leverage percentage change in operating income if volume changes? Briefly explain your findings to the client.

EXCELHINT: To copy a cell from a different worksheet, put a + in the cell where you want the number to go, and then go back to the original worksheet, put your cursor on the cell, and then press enter.

	NEW	ORIGINAL	Change	
Operating income	\$ 720.00	\$ 900.00	\$ (180.00)	Brief explanation: The cost increase by the supplier will cause Jake's variable costs to rise, which in turn, will lower the CM/unit on each of his products and the weighted average CM. With the higher costs, Jake's business will not be as profitable. With a lower WACM, Jake will need to sell more units to breakeven, therefore his margin of
WACM percentage	44%	48%	-4%	
MOS%	32%	38%	-5%	
Operating income	\$ 1,350.00	\$ 900.00	\$ 450.00	Brief explanation: Jakes sales mix has shifted such that he expects to sell more of the more profitable product (Treat-times), and fewer of the less profitable product (Launch- its). As a result, business becomes more profitable, even though the same number of units, in total, are sold. Given this more profitable sales mix, the WACM will increase and Jake won't have to sell as many total units to earn his target profit.
WACM/unit	\$ 9.50	\$ 8.00	\$ 1.50	
Units to earn target profit	1,000	1,188	(188)	
Operating income	\$ 650.00	\$ 900.00	\$ (250.00)	Brief explanation: The new work contract contains more fixed costs and fewer variable costs, therefore, the operating leverage of Jakes's business will be higher. When a company has a higher operating leverage, it means that the operating income will be more sensitive to changes in volume. This can be good, when volume is high, but bad for the company, if volume is low.
Operating leverage factor	4.08	2.67	1.41	
Expected % change in op income	20%	13%	7%	

# How to get away from number crunching...

- ....and into the *PROCESS*





# Personal Budget for after graduation

- **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 (location affects taxes, etc.)
- Research starting salaries, apartments, etc.
- Direction packet walks students through FICA, local, state, and federal income taxes
- Suggested source for healthcare costs
- Budget template with line items provided: they fill in formulas

# Screenshot of Template

MONTHLY INCOME				FOOD EXPENSES			
	Initial Budg	Amended	Difference		Initial Budg	Amended	Difference
Salary and Wages	2500	2500	0	Groceries	250	300	50
Dividends/ Interest			0	Dining out	100	50	(50)
Other income (specify)	0	10	10	Other (coffee, snacks, etc)	100	50	(50)
<b>Total Monthly Income</b>	<b>2500</b>	<b>2510</b>	<b>10</b>	<b>Total Food</b>	<b>450</b>	<b>400</b>	<b>(50)</b>
HOUSING EXPENSES				ENTERTAINMENT EXPENSE			
	Initial Budg	Amended	Difference		Initial Budg	Amended	Difference
Mortgage or rent	700	650	(50)	Netflix/etc	10	10	0
Telephone (cell or land)			0	Music subscriptions			0
Internet and Cable			0	Movies			0
Electricity			0	Sporting events & concert	50	0	(50)
Gas/Oil	30	25	(5)	Games and hobbies			0
Water and Sewer			0	Vacations			0
Waste removal			0	Holiday and Birthday gifts			0
Repairs/maintenance			0	Parties/gatherings/liquor, etc			0
Cleaning/ household supplies			0	Other (specify)			0
Furniture			0	<b>Total entertainment</b>	<b>60</b>	<b>10</b>	<b>(50)</b>
Association fees (condo, etc)			0	SAVINGS			
<b>Total housing</b>	<b>730</b>	<b>675</b>	<b>(55)</b>		Initial Budg	Amended	Difference
TRANSPORTATION EXPENSES				Emergency fund	100	125	25
	Initial Budg	Amended	Difference	Other short term goals			0
Vehicle payment	350	300	(50)	401(k)			0
Bus/taxi fare			0	ROTH IRA	500	450	(50)
Insurance			0	Traditional IRA			0
Fuel	50	50	0	Kids' college fund			0
Maintenance/registration/license			0	<b>Total savings</b>	<b>600</b>	<b>575</b>	<b>(25)</b>
Parking at work/apartment			0	TAXES			
<b>Total transportation</b>	<b>400</b>	<b>350</b>	<b>(50)</b>		Initial Budg	Amended	Difference
INSURANCE EXPENSES				FICA	85	85	0
	Initial Budg	Amended	Difference	Local income tax			0
Home or Renters	50	0	(50)	State income tax			0
Health			0	Federal income tax			0
Life	15	15	0	Property taxes			0
Personal Liability (or other)			0	<b>Total taxes</b>	<b>85</b>	<b>85</b>	<b>0</b>
<b>Total insurance</b>	<b>65</b>	<b>15</b>	<b>(50)</b>	LOAN REPAYMENTS			
	Initial Budg	Amended	Difference		Initial Budg	Amended	Difference





## After initial budget-

- Written: 5 or more feasible cost containment ideas
- Reflect cost cuts in amended budget- with variances
- Written reflection on what they learned
- Written reflection: 3 similarities and 3 differences between business and personal budget




# Student quote from reflection

- *“This project helped me have a better understanding of the budgeting process. It is one thing to know how a budget is supposed to be done, but it is a completely different thing to actually sit down and make a budget.”*



# Financial literacy

- Students' favorite project
- Open lines of communications w/parents, roommates
- Personal financial planning- FICO scores, IRAs/401K, etc.
- Has led to financial literacy talks to various campus groups each semester



## Polling Question 3

How do you incorporate Excel in your introductory managerial accounting course?

- a) We don't incorporate it in this course
- b) Students must complete their homework in Excel
- c) Excel must be used for some homework problems, but not others
- d) We incorporate Excel through projects

# Flexible Budgeting



- **GOAL: Create a flexible budget performance report; use it 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

# Screenshot of Completed Project

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2	<b>Budget assumptions:</b>				<b>Kelsey's Frozen Confectionaries</b>							
3					<b>Master Budget Performance Report</b>							
4	Volume	21,000	cases		<b>For the month ended June 30</b>							
5	Sales Revenue	\$ 50.00	per case									
6	Percent sold on credit	90%	percent of sales									
7												
8	<b>Variable Expenses:</b>											
9	CGS	\$ 35.00	per case									
10	Sales Commission	\$ 2.50	per case									
11	Shipping Expense	\$ 2.00	per case									
12	Bad Debt Expense	1.00%	percent of credit sales									
13												
14	<b>Fixed Expenses:</b>											
15	Salaries	\$ 50,000										
16	Lease on Distribution center	\$ 17,000										
17	Depreciation on fleet & Equip	\$ 10,000										
18	Advertising	\$ 10,000										
19	Office rent, phone, internet	\$ 11,000										
20												
21	Management by exception	15%	Investigation rule									
22												
23												
24												

	ACTUAL	MASTER BUDGET	VARIANCE	VAR. %	F or U
Volume (in cases)	21,460	21,000	\$ 460	2.2%	F
Sales Revenue	\$ 1,131,020	\$ 1,050,000	\$ 81,020	7.7%	F
Less: Variable Expenses					
Cost of Goods Sold	\$ 682,880	\$ 735,000	\$ (52,120)	-7.1%	F
Sales Commissions	\$ 58,685	\$ 52,500	\$ 6,185	11.8%	U
Shipping Expense	\$ 44,213	\$ 42,000	\$ 2,213	5.3%	U
Bad debt expense	\$ 16,930	\$ 9,450	\$ 7,480	79.2%	U
Contribution Margin	\$ 328,312	\$ 211,050	\$ 117,262	55.6%	F
Less: Fixed Expenses					
Salaries	\$ 43,000	\$ 50,000	\$ (7,000)	-14.0%	F
Lease on Distn center	\$ 15,500	\$ 17,000	\$ (1,500)	-8.8%	F
Deprec. On fleet/equip	\$ 12,000	\$ 10,000	\$ 2,000	20.0%	U
Advertising	\$ 7,750	\$ 10,000	\$ (2,250)	-22.5%	F
Office rent, phone, net	\$ 12,300	\$ 11,000	\$ 1,300	11.8%	U
Operating Income	\$ 237,762	\$ 113,050	\$ 124,712	110.3%	F

# Evaluate Variances vs. Client's Story

In the table below, classify EACH ACCOUNT on the budget according to whether the variances in the performance report are consistent or inconsistent with the client's story, or unexplained by the client's story. Place an "X" in the appropriate column. If the Flexible Budget Variance and Sales Volume Variance differ with respect to one account (i.e., one is consistent and one is inconsistent) then indicate which belongs in which column.

	Consistent	Inconsistent	Unexplained
Sales revenue			
Cost of Goods Sold			
Commission			
Shipping Expense			
Bad debt expense			
Salaries			
Lease of distribution center			
Depreciation of fleet and equip			
Advertising			
Office rent, phone, internet			

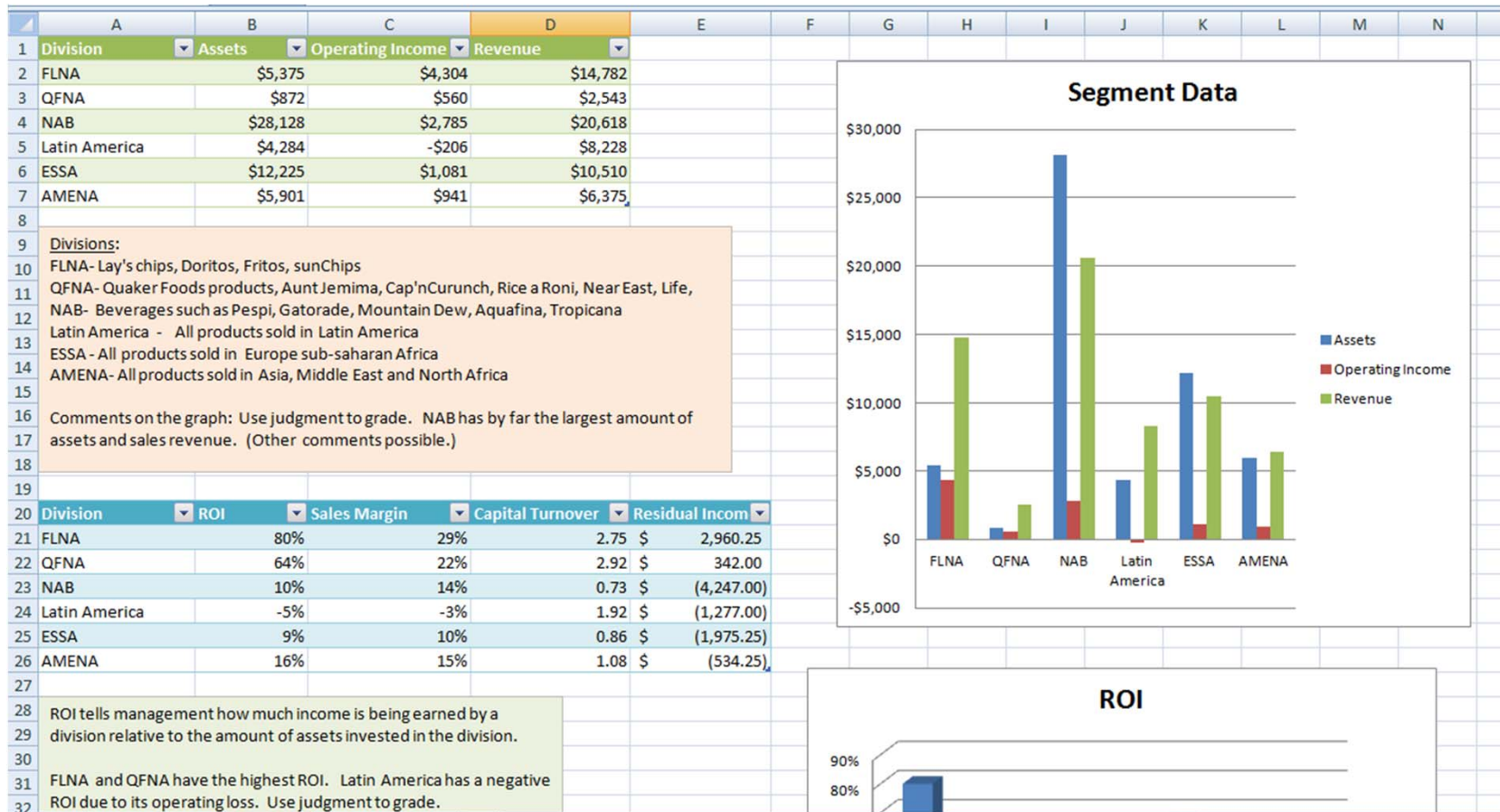
# Segment Performance Evaluation

- **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 could improve ROI, sales margin, and capital turnover.
  - Make a capital allocation decision.





# Screenshot of Completed Project





Questions? Feel free to contact me.

[Karen.braun@case.edu](mailto:Karen.braun@case.edu)

- Excel projects at the following website:  
[sites.google.com/case.edu/karenbraunexcelprojects](https://sites.google.com/case.edu/karenbraunexcelprojects)

Thank you!!!





## Part II-


- Motivating students to prepare for class so that you *can* dig deeper into the material in class
- The “Danielle Problem”



## Polling Question 4

What do you do to motivate students to prepare for class?

- a) No preparation expected and/or required
- b) Daily quizzes over the assigned pre-class readings/videos
- c) Occasional pop quizzes
- d) Cold-call and other motivating tactics



# How to get students to prepare?

(solving the “Danielle problem”)


- Digestible-size reading assignments
- Quiz over reading
  - Use password protected quiz in LMS
  - First 5 minutes of class
  - Open note
  - 3 conceptual multiple choice questions
- Note-taking
  - Free-form notes
  - Directed reading guides





# 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 Directed Reading guides on a regular basis?”)
  - Yes = 58.3%
  - No= 15%
  - Sometimes used them= 26.7%



**Chapter3**  
**Job Costing**  
**Directed Reading**

**Part I- Introduction**

1. To determine the profit margins on its products, what does Life Fitness first need to ascertain?
2. What does the company use job costing information for?

**Part II- What methods are used to determine the cost of manufacturing a product? (LO 1)**


3. What is the end goal of any product costing system?
4. Process costing is used by companies that \_\_\_\_\_  
\_\_\_\_\_.
5. What is the general idea behind process costing?
6. Job costing is used by companies that \_\_\_\_\_  
\_\_\_\_\_.  
It's also used by \_\_\_\_\_  
\_\_\_\_\_.



# Student Feedback

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





# 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.”



# 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.”



# 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 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)
- Other uses: hand in in lieu of quiz



# CPE Reminder

The CPE Form will appear as you click off the webinar

- Your responses, along with your attendance, will comprise the criteria for Continuing Professional Education credit, as regulated by NASBA. Attendees at this presentation who meet the criteria will be awarded 1.0 CPE Credit Hour in the NASBA Field of Study category, “Finance”
- NOTE: The American Accounting Association is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be addressed to the National Registry of CPE Sponsors through its Web site: <http://www.NasbaRegistry.org>



Questions? Feel free to contact me.

[Karen.braun@case.edu](mailto:Karen.braun@case.edu)

- Directed reading guides housed in MyAccountingLab/Instructor resources
- Excel projects at the following website:  
[sites.google.com/case.edu/karenbraunexcelprojects](https://sites.google.com/case.edu/karenbraunexcelprojects)

Thank you!!!

