

Introduction

Managerial accounting classes provide a rich opportunity to engage students in cross-disciplinary projects that require critical-thinking and decision-making skills as well as provide an opportunity for written communication.

Purpose

This presentation argues for:

- using ‘rich’ case projects in introductory cases that provide opportunity for development of ideas and decision-making in uncertainty
- splitting the analysis portion from the written portion of the assignment, allowing students who are not successful at the analysis a chance to write something meaningful
- using a developmental process in preparing students for better written communication which include the use of peer reviewing

Case Projects

Introductory students need to be exposed to meaningful problems early in their education

- Experiencing these kinds of cases earlier in the business coursework lays a foundation that can be used in later classes

These cases need to be challenging with complex solutions in uncertain decision environments

- Cases provide a more realistic idea of the complexity of business issues and can transcend other business areas
- Challenging cases engage the students, particularly the better students who are often bored with basic cases
- Minimum competencies can be achieved while allowing more advanced students to demonstrate their stronger skills and deeper thoughts

Good projects are designed to include:

- a business situation requiring a decision
- a justification for the decision conclusions
(ideal cases have decisions for which either side is supportable)
- an opportunity to do deeper analysis and make further recommendations

Project Progression

Part 1: Present material and assign project

Part 2: Analysis due and discussed in class

- Separating analysis from writing allows students who are unsuccessful with the analysis to be unencumbered in the writing portion
- Analysis and conclusions can be discussed in groups and then as a whole guided by instructor
- At the introductory level, students need to see how more complex analysis is conducted

Part 3: First paper submission due and exchanged for peer reviews

- Guidance is needed to teach students how to critically evaluate each other's work

Part 4: Peer Reviews returned; papers rewritten

Part 5: Final Report due

- Followed up with presentation of excellent papers

Critical Thinking Skills

Critical thinking is exploring questions about which solutions for issues that are not clearly defined and for which there are no clear-cut answers.

Model for assisting student to think critically:

- Students attempt the process on their own
- Students work in groups to improve their analysis, decision and justification
- Instructor models the process through class discussion
- Students rework their analysis and present conclusions in writing

Developing Writing Skills

Students frequently have difficulty writing.

Usually, it is not sentence structure and grammar that is a problem but rather it is thought organization.

Executive summaries

- Excellent practice at summarizing most important points of paper
- Good practice for business and not usually taught in standard college writing classes

Paper Structure

- Outlines are important and should be required
- Initially, providing a structured outline helps students because it
 - demonstrates appropriate organization
 - allows students to practice good paragraph development
 - Topic sentences
 - Supporting details
 - Transitions
- These outlines can be developed by instructor, in groups, or by the class
- For subsequent projects, students can be required to create their own outlines

Practice, Practice, Practice
More is better!

Peer Review

Reviewing other students' work has many advantages

- Prepares students to submit and review each others' work in auditing and accounting environments
- Allows students to see others' work both good and bad
- Changes the focus of reading and writing to critically evaluating the writing product

Excellent reference on value of using peer reviewed writing in Accounting

- Matherly, M. and Burney, L., "Using Peer-Reviewed Writing in the Accounting Curriculum: A Teaching Note," *Issues in Accounting Education*, 24:3, 2009.

Sample Projects

Cost Behavior Project- Regression Analysis

Using data provided, students are to conduct a regression analysis of three explanatory variables on the dependent variable and select the one that best explains the dependent variable. The setting is a company with multiple stores with independent purchasing departments and the students are the staff accountants at the corporate headquarters. The dependant variable is purchase department costs and the available independent variables are: merchandise purchased, number of suppliers, and number of purchase orders.

- Basic expectation: Identify best cost driver, providing justification for response
- Deeper analysis: multi-variable model
- Induced complexities
 - Data is seeded with a couple of stores that are excellent at keeping costs low. These can be recommended as model stores
 - Data is also seeded with an outlier due to natural disaster or data-entry error
- Critical-thinking issues:
 - How can this information be used to contain costs?
 - Give recommendations to the company
- Cross-disciplinary value
 - links well with statistic classes
 - heightens awareness of marketing students of purchasing costs

- Core competency
 - Critical thinking about data provided
 - Technical tools: graphs, regression

Master Budget- Sensitivity Analysis

Students are to assume to role of a bank loan officer and using prepared budgets decide whether to extend a short-term loan or not. Either decision is acceptable but needs to be justified based on assumptions of the environment. Budgets are prepared in excel using an input section and not hard coding inputs. Sales sensitivity analysis is conducted to explore the risk of lending.

- Basic expectation: develop a master budget
 - Conduct a sensitivity analysis, by changing sales estimates
- Deeper analysis: changing other parameters such as desired ending inventory levels
- Critical-thinking issues:
 - Risk of sales not meeting expectations
 - Sensitivity analysis of other parameters
 - Risk-return relationship
 - Current lending environment
 - Business practice recommendations
- Cross-disciplinary value
 - links well with finance & MIS classes
- Core competency
 - Decision-making under uncertainty
 - Technical tools: basic programming ideas

Activity Based Costing (ABC)

The case is set in a manufacturing company which makes two parts. Students assume the role of a consultant to the company and are asked to compute product profitability using traditional costing and using ABC and then argue for using ABC in decision making.

- Basic expectation: compute product profitability
 - using traditional costing
 - using activity based costing
- Deeper analysis: recommendations for
 - Product pricing
 - Demand given changes in pricing
 - Cutting costs from cost driver analysis
- Critical-thinking issues:
 - Pricing and profitability
 - Relationship between demand and price
 - Areas for improvement in operations to cut costs
- Cross-disciplinary value
 - links with marketing and economics classes
- Core competency
 - Critical-thinking, looking at the big picture

Instructor Tips

Analysis

- For introductory classes, it is helpful to actually post the instructor's analysis so students have an example upon which to base their writing

First Submission

- By calling the first submission “first submission” students do not confuse the level of expectation with that of a ‘first draft’. It is important for students to always share with colleagues ‘final drafts’ of their papers as opposed to ‘first drafts’. These should be polished and look good. There is a general understanding among students that first drafts do not have to be polished and this leads to sloppy work.
- Note also that first submissions need to have sufficient grading points allocated to motivate proper effort.

Peer Reviews

- Peer reviews also need sufficient grading points to motivate proper effort.
- Some students do not like having other students see their work. Therefore, I assigned student numbers

“class ID” and used these numbers as the paper identifiers.

- Students are encouraged to overcome fear of having others see their work. Reviewing others work is common in accounting practice.
- Two peer reviewers are assigned per paper and these are rotated so over the semester students read papers from four other students.

Final Report

- I prefer to have this printed in hard copy and be as professional as possible.

Grading Tips

Because this project has multiple parts, grading can be onerous and must be managed efficiently.

Some points are effort related whereas others are performance based.

- Analysis points are performance based and constitute about 1/3 of total project points.
 - Using a common form facilitates grading
 - Can use Excel to grade (*see CPE#6 How to Design and Program Self-Grading Excel Assignments for Financial and Managerial Accounting Courses*)

- First submission and peer review points are effort related and constitute 1/3 of the points.
 - Quickly reviewed for effort level and attention to assignment details.
 - Papers can be submitted as hard copies. These must be quickly graded before class so they can be redistributed in class.
 - Papers can also be uploaded to database where peer reviewers can retrieve and comment and instructor can evaluate.
 - First submissions and peer reviews graded:
 - complete (100%),
 - mostly complete (90%),
 - incomplete (80%),
 - unacceptable (65%)
- Final submission points are performance based and constitute the final 1/3 of the points.
 - Page limits are essential (organizes thoughts)
 - Using writing rubric helps
 - AICPA has writing guidelines that form useful rubric