

Fall 2007 LDC Exam Results --Managerial Accounting

This brief report describes how well fall 2007 BUS 302L students performed on their *first* take of the managerial accounting exam. These results offer some insight into which of the top eight concepts junior-level business students find most difficult.

Roughly 1,007 students enrolled in BUS 302L during the fall 2007 semester. Table 1 contains the top eight concepts for managerial accounting. Table 2 provides a breakdown of the LDC exam by topic number and level of question difficulty.

Table 1. Top Eight Concepts in Managerial Accounting

Topic Number	Managerial Accounting Concept
1	Identify and be able to provide an explanation of the key differences between financial accounting and managerial accounting.
2	Define and understand the various meanings of the term cost. Be able to correctly classify cost into major categories such as product cost, period cost, fixed cost, variable cost, direct cost, indirect cost, opportunity cost, etc.
3	Be able to accumulate costs for a variety of “cost objects” such as product, service, activity, program, or organizational unit, time period, etc. Explain overhead allocations using single plant wide rates, departmental rates, and activity cost pool rates. Calculate and know how to dispose of over or under absorbed (applied) overhead.
4	Compute breakeven point in units and in dollars for a single product. Know the related concepts of cost variability, contribution margin (both in unit and as a ratio), and safety margin.
5	Know how to prepare a master budget and a simple set of operating budgets for sales, inventory; expenses, cash collections, and cash payments.
6	Know how to distinguish a capital expenditure from a recurring expense & how to analyze the desirability of a capital expenditure using present value analysis
7	Understand, apply, and explain the concept of different costs for different purposes, such as product costing and inventory valuation, income measurement, short-term decisions, cost control, and long- term decisions such as make or buy or discontinue products.
8	Know how to use cost data in decision-making, including what is relevant and what is not.

The third and fourth columns in Table 2 indicate the number of student responses and the percentage of responses that were correct. For example, row one shows that students answered 1,204 questions on topic 1 with a level one difficulty *and* that 61.7 percent of those answers were correct.¹

The level of question difficulty is determined by the accounting faculty who developed the exam questions. As expected, Table 2 shows a lower percentage of correct responses for the more difficult questions.

Overall student performance is fairly poor on the managerial accounting exam. For example, the percentage of correct answers by topic range from a high of only 65.8 (51.1) percent to a low of 43.5 (34.2) percent on the questions with level one (two) difficulty.

Table 2. LDC Managerial Accounting Results by Topic and Question Difficulty

Topic Number	Question Difficulty	Number of Student Responses	Correct Answers (percent)
1	1	1,204	61.7
1	2	404	46.9
2	1	681	65.7
2	2	927	41.4
3	1	641	59.3
3	2	967	51.1
4	1	724	56.2
4	2	884	50.3
5	1	900	65.8
5	2	708	45.3
6	1	698	46.3
6	2	910	34.2
7	1	796	43.5
7	2	812	41.2
8	1	545	45.7
8	2	1,063	35.9

When controlling for question difficulty, student performance is consistently higher on topic 1. Students appear to have the greatest difficulty on topics 6 and 8. This finding is also shown when ignoring question difficulty and displaying LDC exam results by topic only in Table 3.

¹ Recall that this LDC exam has 16 questions and only 8 topics. Thus, it is possible for the number of student responses to be greater than the number of students who took the LDC exam.

Table 3 indicates that student performance is highest on topics 1 and 5 where they correctly answered roughly 57 percent of the questions. Students appear to have the most difficulty on topics 6 and 8 where they answered 39 percent of the questions correctly.

Table 3. LDC Managerial Accounting Results by Topic Only

Topic Number	Number of Student Responses	Correct Answers (percent)
1	1,608	57.9
2	1,608	51.7
3	1,608	54.4
4	1,608	52.9
5	1,608	56.8
6	1,608	39.5
7	1,608	42.3
8	1,608	39.2

A p chart was used to investigate whether the percentage of correct answers differs significantly among the topics. The results are shown on the following page in Figure 1. The p chart reveals that 49.3 percent of all questions on the managerial accounting exam are answered correctly. However, topics 1, 3, and 5 are significantly above this overall percentage, while topics 6, 7, and 8 are significantly below it. Topics 2 and 4 vary from the overall percentage but the differences are not statistically significant.

If the LDC exam questions are a fair indicator of student knowledge, then lower-division managerial accounting instructors may need to devote more time to topics 6, 7, and 8.

Figure 1. P Chart of the Percentage of Correct Answers by Topic

