



In Search of **Practice-Based Topics** for Management Accounting Education

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IMA AND AICPA MEMBERS ARE SURVEYED TO FIND THE SKILLS AND ABILITIES ACCOUNTING PRACTITIONERS FEEL ARE MOST IMPORTANT FOR THOSE ENTERING THE MANAGEMENT ACCOUNTING PROFESSION. THE RESULTS INDICATE A NEED FOR CHANGES TO THE ACCOUNTING CURRICULA IN ORDER TO BETTER PREPARE GRADUATES FOR THEIR FUTURE CAREERS.

The corporate landscape continues to undergo considerable change with ongoing developments such as escalating globalization, greater competition, increased use of information technology, new regulations aimed at corporate governance, and more. These changes have redefined the role of accountants as corporate decision makers, business consultants, and analysts. Some have even described the role of accountants as being managers, corporate executives, or business partners.¹ To better prepare accounting graduates to fill these and other emerging roles, eliciting the views of those involved in the operation of today's business activities is essential. While accounting faculty generally tend to emphasize traditional accounting topics or those that are not necessarily important to practitioners, a closer look at contemporary business issues and their relationship to accounting is a critical step in curriculum development.²

This article presents the results of a survey of accounting practitioners regarding the topics that they feel

are most important and relevant for accountants in their companies. The primary focus of this study is on the knowledge, skills, and abilities that companies expect from management accountants. The investigation is divided into two sets of topical coverage—entry-level positions and senior-level positions. The results can help accounting educators design new courses or revise their current cost/managerial accounting course contents in order to better prepare students for a more practice-oriented accounting career. In addition to accounting educators, professional organizations can also use the results of this study to identify subject areas that should be included in professional examinations.

The following sections include a brief look at prior studies, discussion of the research methodology and results, and an analysis that compares the practitioners' attitudes based on their membership in either the Institute of Management Accountants (IMA®) or American Institute of Certified Public Accountants (AICPA), which includes the importance of the topics to an entry-level vs. senior-level position.

PRIOR STUDIES

During the 1990s, the Accounting Education Change Commission (AECC) announced that developments in the work environment, including the widespread use of communication and presentation tools in business, had changed the role of accountants from providers of accounting information to communicators, consultants, and decision makers. Individuals entering the profession were expected to display effective problem-solving, communication, interpersonal, and leadership skills, and they were expected to demonstrate the ability to effectively control and manage multidimensional and multistep projects throughout their career.

In response to these challenges, IMA launched a series of research projects to examine the changes in management accounting and financial management and determine the skills necessary for a successful career in the newly redefined profession. The results, though very general, identified work activities of corporate accountants along with the knowledge, skills, and abilities required for a successful career in corporate accounting.³ Results of the research efforts, published in 1994, 1996, and 1999, conclude that corporate accountants perform a wide variety of activities—many of which depend on their role in the organization, position in the firm, years of experience, and company size. Some of these activities are within the realm of traditional management accounting jobs, while others relate to corporate accounting work, including financial reporting, tax accounting, and verification of recorded data. According to *The Practice Analysis of Management Accounting*, from 1996, the top two work activities corporate accountants perform most frequently are “managing the accounting/finance function” and “accounting systems and financial reporting.”⁴

The most recent IMA practice analysis, 1999’s *Counting More, Counting Less: Transformations in the Management Accounting Profession*, concludes that we should expect major changes in the activities of management accountants. The most significant changes include:

- ◆ Less reporting of information and more planning and analysis,
- ◆ More involvement in operations, and
- ◆ More involvement in decision making.⁵

Considering the changes reported by IMA’s studies,

there appears to be a need for periodic examination of market outlook, including practitioners’ expectations of accounting graduates as future corporate managers. According to the 1999 practice analysis:

“To better meet the needs of their students and corporate customers, college and university accounting educators should obtain a better understanding of the work performed in modern corporations....The insights gained should be used to revise management accounting courses and the management accounting curricula.”⁶

While the IMA practice analyses provide a general framework for management accountants, the recommendations are too broad to help faculty in the specific curriculum development.

Several other studies have investigated the topical contents of the management accounting curriculum.⁷ While each study has introduced a unique set of management accounting topics prioritized in rank order, similarities abound. The latest of these studies, published prior to IMA’s practice analysis projects, was the 1988 study by Michael A. Robinson and M. Edgar Barrett, which identified a total of 51 topics that a management accounting curriculum should include. Robinson and Barrett conclude that substantial differences exist between what is taught in management accounting curricula and the core of topics that educators and practitioners believe should be included.⁸ Current curricula could also be deficient both in the breadth of management accounting coverage and the depth of learning, including the amount of time allocated to teaching the topics being covered.⁹

STUDY DESIGN AND PROFILE OF RESPONDENTS

This study is based on responses to a questionnaire sent to 1,000 accounting practitioners (see Management Accounting Topical Survey on next page). The survey asked practitioners to indicate their highest degree earned, major, certification, field of work, nature of business involvement, and years of experience. Further, participants were instructed to rate how important each of the 86 cost/management accounting topics (compiled

Management Accounting Topical Survey

BACKGROUND INFORMATION:

- (1) Highest degree earned: None Bachelor Master Ph.D. Other
- (2) Major: Accounting Finance Other business Engineering or science Other
- (3) Certification: None CPA CMA CIA CFM Other
- (4) Field of work: Management Corporate accounting Consulting Auditing Tax Other
- (5) Nature of business: Public accounting Agriculture Education
 (Check one) Financial Real estate Public utility
 Manufacturing Healthcare Public admin. (Govt.)
 Retail Hospitality Transportation
 Insurance Communication Other
- (6) Number of years of experience in corporate accounting Years

PRACTICE ANALYSIS:

Please rate the importance of knowledge of the following topics for an accountant in your organization at the staff and senior positions:

Subjects	Staff Positions Importance						Senior Positions Importance					
	Low				High	N/A	Low				High	N/A
Historical perspectives	1	2	3	4	5	6	1	2	3	4	5	6
Comparison to financial accounting	1	2	3	4	5	6	1	2	3	4	5	6
Managerial accounting in service entities	1	2	3	4	5	6	1	2	3	4	5	6
Sales mix issues	1	2	3	4	5	6	1	2	3	4	5	6
Prime/conversion costs	1	2	3	4	5	6	1	2	3	4	5	6
Manufacturing cost flows	1	2	3	4	5	6	1	2	3	4	5	6
Overhead allocation	1	2	3	4	5	6	1	2	3	4	5	6
Support department cost allocation	1	2	3	4	5	6	1	2	3	4	5	6
Short-term resource allocation	1	2	3	4	5	6	1	2	3	4	5	6
Activity-based costing (ABC)	1	2	3	4	5	6	1	2	3	4	5	6
Joint/byproduct costs	1	2	3	4	5	6	1	2	3	4	5	6
Discretionary and nonmanufacturing costs	1	2	3	4	5	6	1	2	3	4	5	6
Transfer pricing	1	2	3	4	5	6	1	2	3	4	5	6
Cost behavior	1	2	3	4	5	6	1	2	3	4	5	6
Relevant cost analysis	1	2	3	4	5	6	1	2	3	4	5	6
Absorption/variable costing	1	2	3	4	5	6	1	2	3	4	5	6
Break-even analysis	1	2	3	4	5	6	1	2	3	4	5	6
Cost-volume-profit analysis	1	2	3	4	5	6	1	2	3	4	5	6
Cost systems development	1	2	3	4	5	6	1	2	3	4	5	6
Job order costing	1	2	3	4	5	6	1	2	3	4	5	6
Process costing	1	2	3	4	5	6	1	2	3	4	5	6
Operation costing	1	2	3	4	5	6	1	2	3	4	5	6
Costing waste, rework, spoilage, & scrap	1	2	3	4	5	6	1	2	3	4	5	6
Standard costing	1	2	3	4	5	6	1	2	3	4	5	6
Financial budgets	1	2	3	4	5	6	1	2	3	4	5	6
Operational budgets	1	2	3	4	5	6	1	2	3	4	5	6
Master budgets	1	2	3	4	5	6	1	2	3	4	5	6
Flexible budgets	1	2	3	4	5	6	1	2	3	4	5	6
Behavioral aspects of budgeting	1	2	3	4	5	6	1	2	3	4	5	6
Short-term planning	1	2	3	4	5	6	1	2	3	4	5	6
Inflation adjustments	1	2	3	4	5	6	1	2	3	4	5	6
The value of information	1	2	3	4	5	6	1	2	3	4	5	6
Decision trees	1	2	3	4	5	6	1	2	3	4	5	6
Decision making under uncertainty	1	2	3	4	5	6	1	2	3	4	5	6
Short-term planning with constraints	1	2	3	4	5	6	1	2	3	4	5	6

Subjects	Staff Positions Importance						Senior Positions Importance					
	Low				High	N/A	Low				High	N/A
Nonfinancial information analysis	1	2	3	4	5	6	1	2	3	4	5	6
Revenue allocation & profitability analysis	1	2	3	4	5	6	1	2	3	4	5	6
Cost estimation models	1	2	3	4	5	6	1	2	3	4	5	6
Learning curve models	1	2	3	4	5	6	1	2	3	4	5	6
Nonlinear forecasting models	1	2	3	4	5	6	1	2	3	4	5	6
Agency models	1	2	3	4	5	6	1	2	3	4	5	6
Multiple-product decisions	1	2	3	4	5	6	1	2	3	4	5	6
Pricing decisions	1	2	3	4	5	6	1	2	3	4	5	6
Capital budgeting	1	2	3	4	5	6	1	2	3	4	5	6
Make, buy, or lease decisions	1	2	3	4	5	6	1	2	3	4	5	6
Differential cost analysis	1	2	3	4	5	6	1	2	3	4	5	6
Segment profitability analysis	1	2	3	4	5	6	1	2	3	4	5	6
Regression analysis	1	2	3	4	5	6	1	2	3	4	5	6
Sensitivity analysis	1	2	3	4	5	6	1	2	3	4	5	6
Using ABC for analyzing customer profitability	1	2	3	4	5	6	1	2	3	4	5	6
Flexible budget variances for product-related costs	1	2	3	4	5	6	1	2	3	4	5	6
Sales price and volume variances	1	2	3	4	5	6	1	2	3	4	5	6
Production mix and yield variances	1	2	3	4	5	6	1	2	3	4	5	6
Sales mix and quantity variances	1	2	3	4	5	6	1	2	3	4	5	6
Production price and efficiency variances	1	2	3	4	5	6	1	2	3	4	5	6
Overhead budget/efficiency/volume variances	1	2	3	4	5	6	1	2	3	4	5	6
Controllable and uncontrollable variances	1	2	3	4	5	6	1	2	3	4	5	6
Variance analysis	1	2	3	4	5	6	1	2	3	4	5	6
Activity-based management (ABM)	1	2	3	4	5	6	1	2	3	4	5	6
Total Quality Management (TQM)	1	2	3	4	5	6	1	2	3	4	5	6
Continuous improvement	1	2	3	4	5	6	1	2	3	4	5	6
Benchmarking	1	2	3	4	5	6	1	2	3	4	5	6
Strategic cost management	1	2	3	4	5	6	1	2	3	4	5	6
Value chains	1	2	3	4	5	6	1	2	3	4	5	6
Strategy implementation	1	2	3	4	5	6	1	2	3	4	5	6
Target costing	1	2	3	4	5	6	1	2	3	4	5	6
Management control systems	1	2	3	4	5	6	1	2	3	4	5	6
Decentralization	1	2	3	4	5	6	1	2	3	4	5	6
Balanced scorecard	1	2	3	4	5	6	1	2	3	4	5	6
Productivity & performance evaluation	1	2	3	4	5	6	1	2	3	4	5	6
Divisional performance evaluation	1	2	3	4	5	6	1	2	3	4	5	6
Nonfinancial performance measures	1	2	3	4	5	6	1	2	3	4	5	6
Employee compensation/bonus systems	1	2	3	4	5	6	1	2	3	4	5	6
Accounting for payroll	1	2	3	4	5	6	1	2	3	4	5	6
Working capital management	1	2	3	4	5	6	1	2	3	4	5	6
Asset management and tax consequences	1	2	3	4	5	6	1	2	3	4	5	6
Inventory control	1	2	3	4	5	6	1	2	3	4	5	6
Materials requirements planning (MRP)	1	2	3	4	5	6	1	2	3	4	5	6
Just-in-Time inventory methods (JIT)	1	2	3	4	5	6	1	2	3	4	5	6
Global manufacturing issues	1	2	3	4	5	6	1	2	3	4	5	6
Theory of constraints	1	2	3	4	5	6	1	2	3	4	5	6
Backflush costing	1	2	3	4	5	6	1	2	3	4	5	6
Ethics and fraud	1	2	3	4	5	6	1	2	3	4	5	6
Problem solving by developing spreadsheet templates	1	2	3	4	5	6	1	2	3	4	5	6
Problem solving using commercial software	1	2	3	4	5	6	1	2	3	4	5	6

from the earlier studies) were to a successful career in a staff or senior accounting position. The rating scale was a five-point Likert scale where 1 represented low importance and 5 denoted high importance.

The questionnaire was initially piloted with a small group of accountants in southern California before being mailed to two groups of randomly selected accounting practitioners: a sample of 500 individuals from the IMA membership list and 500 from the membership list of AICPA. The questionnaire assured anonymity and instructed participants to answer each question by relying solely on their own experience, type of work, education, and position within their company.

Two mailings resulted in 224 usable responses from IMA members (IMAs) and 172 usable responses from AICPA members (AICPAs). The overall response rate was 39.6%, with a participation rate of 44.8% for the IMAs and 34.4% for the AICPAs. Statistical tests on the first and second groups of responses to measure the probability of nonresponse bias showed no significant differences between the two groups, thus leading to the conclusion that the chance of nonresponse bias was statistically insignificant ($p=0.05$). The response rates in this study are comparable to those experienced in similar studies.¹⁰

Respondents' background information shows a larger percentage of the IMAs had a master's degree (50%) compared to the AICPAs (33%). The predominant area of study for both groups was accounting. More than one-third had no certification (37.5%), and the rest held either a Certified Public Accountant (CPA) or Certified Management Accountant (CMA®) certification. Eighty-six percent of the IMA members were in a management position, compared to only 50% of the AICPA members. Conversely, the percentage of the AICPAs working in a consulting position was twice that of the IMAs. AICPAs generally were in public accounting (76.7%), while the IMAs were involved in a variety of business disciplines, with only 5.4% in public accounting.

RESULTS AND ANALYSIS:

A COMMON TABLE OF CONTENTS

The data was analyzed to determine the importance of 86 topics for staff and senior management accounting

positions. The mean ratings were used to rank the subjects from the most important to the least important.

Staff Positions

Table 1 presents the 30 highest-rated topics by all respondents for an entry-level position. Only 30 topics are listed because Robinson and Barrett found that the average number of topics taught in management accounting courses is 28 in accredited baccalaureate programs and 25 in nonaccredited programs.¹¹

As might have been expected following the spate of corporate accounting scandals, respondents consider ethics and fraud the most important topic, giving it a mean rating of 4.09. The next two highest-rated subjects reflect an emerging trend in the knowledge base of management accountants: Practitioners expect their staff accountants to know problem solving using spreadsheets (mean score of 4.05) and problem solving using commercial software (3.83). Other subjects listed are more closely associated with the table of contents of textbooks used in traditional management accounting courses, such as cost allocation, budgeting, standard costing, variance investigation, cost-volume-profit analysis, and absorption/variable costing. The list also contains several subjects not mentioned in previous studies: the value of information, continuous improvement, inventory control, manufacturing cost flows, and management accounting in service entities.

Senior Positions

A similar analysis identified the most desired management accounting topic areas for a senior position. The rank and mean ratings of the 30 subjects appear in Table 2. (In 1988, Robinson and Barrett found that an average of 29 topics are taught in master's programs.¹²) Once again, respondents overwhelmingly agreed that ethics and fraud is the most important teaching subject (4.52), followed by financial (4.50) and operating budgets (4.47).

There is considerable overlap between the coverage required for a staff position vs. a senior position. Seventeen of the 30 top-rated subjects appear on both lists. The overall mean ratings obtained for the topics considered important for senior positions (ranging from 4.52 to 3.98), however, are significantly greater than

Table 1: Management Accounting Topical Coverage Selected for Staff Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE 5 = HIGH IMPORTANCE)		
	Rank	Mean	SD
Ethics and Fraud	1	4.09	1.10
Problem Solving Using Spreadsheets	2	4.05	1.05
Problem Solving Using Commercial Software	3	3.83	1.05
Overhead Allocation	4	3.68	0.96
The Value of Information	5	3.63	1.10
Operating Budgets	6	3.61	1.04
Financial Budgets	7	3.57	1.15
Variance Analysis	8	3.55	1.06
Comparison to Financial Accounting	9	3.52	1.08
Manufacturing Cash Flows	10	3.52	1.17
Continuous Improvement	11	3.48	1.08
Cost-Volume-Profit Analysis	12	3.46	1.24
Inventory Control	13	3.45	1.19
Support Department Cost Allocations	14	3.43	1.08
Break-even Analysis	15	3.42	1.14
Controllable and Uncontrollable Variance	16	3.35	0.97
Absorption/Variable Costing	17	3.34	1.08
Revenue Allocation and Customer Profitability Analysis	18	3.33	1.01
Standard Costing	19	3.33	1.24
Cost/Managerial Accounting in Service Entities	20	3.32	1.11
Accounting for Payroll	21	3.30	1.26
Management Control Systems	22	3.29	1.02
Employee Compensation/Bonus Systems	23	3.28	1.07
Production Price and Efficiency Variances	24	3.28	1.11
Master Budgets	25	3.27	1.10
Total Quality Management (TQM)	26	3.23	1.15
Job Order Costing	27	3.23	1.33
Operation Costing	28	3.22	1.13
Sales Price and Volume Variances	29	3.22	1.14
Flexible Budgets	30	3.20	1.14

those for staff positions (ranging from 4.09 to 3.20), which suggests that perhaps the depth of knowledge that senior accountants are expected to possess should be significantly greater than that for the entry-level professionals.

Other common topic areas for both staff and senior positions are problem solving using spreadsheets, the value of information, cost-volume-profit analysis, break-even analysis, master budgeting, revenue variance and income analysis, problem solving

Table 2: Management Accounting Topical Coverage Selected for Senior Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE	5 = HIGH IMPORTANCE)	Senior	
	Rank	Mean	SD	
Ethics and Fraud	1	4.52	0.85	
Financial Budgets	2	4.50	0.83	
Operating Budgets	3	4.47	0.89	
Make, Buy, or Lease Decisions	4	4.30	0.87	
Problem Solving Using Spreadsheets	5	4.30	0.88	
The Value of Information	6	4.27	0.83	
Capital Budgeting	7	4.26	0.89	
Cost-Volume-Profit Analysis	8	4.26	1.03	
Working Capital Management	9	4.24	0.94	
Break-even Analysis	10	4.23	0.87	
Master Budgets	11	4.22	0.97	
Revenue Allocation and Customer Profitability Analysis	12	4.21	0.97	
Problem Solving Using Commercial Software	13	4.20	0.88	
Overhead Allocation	14	4.19	0.88	
Asset Management and Tax Consequences	15	4.18	0.89	
Inventory Control	16	4.13	0.91	
Divisional Performance Evaluation	17	4.10	0.95	
Productivity and Performance Evaluation	18	4.08	1.06	
Cost Systems Development	19	4.07	0.91	
Employee Compensation/Bonus Systems	20	4.07	0.98	
Relevant Cost Analysis	21	4.07	0.98	
Management Control Systems	22	4.06	0.99	
Variance Analysis	23	4.05	1.01	
Pricing Decisions	24	4.05	1.08	
Short-term Planning	25	4.04	0.90	
Flexible Budgets	26	4.04	1.05	
Decision Making under Uncertainty	27	4.03	1.01	
Segment Profitability Analysis	28	4.02	0.04	
Comparison to Financial Accounting	29	4.02	1.01	
Behavioral Aspects of Budgeting	30	3.98	1.23	

using commercial software, overhead allocation, inventory control, employee compensation systems, management control systems, variance investigation, flexible budgeting, and comparison to financial accounting.

Compared to the staff positions—and consistent

with IMA's findings—senior management accountants seem less involved with standard costing, product costing, detailed variance analysis, and accounting for payroll. Instead, they spend more time on short- and long-term decisions such as make, lease, or buy decisions; capital investment; working

Table 3: Management Accounting Topical Coverage Selected by IMA Members for Staff Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE	5 = HIGH IMPORTANCE)	
	Rank	Mean	SD
Ethics and Fraud	1	4.17	1.08
Problem Solving Using Spreadsheets	2	4.07	1.03
Problem Solving Using Commercial Software	3	3.78	1.06
Overhead Allocation	4	3.72	0.95
Continuous Improvement	5	3.64	0.98
The Value of Information	6	3.63	1.03
Operating Budgets	7	3.61	1.02
Variance Analysis	8	3.58	1.01
Manufacturing Cost Flows	9	3.57	1.28
Financial Budgets	10	3.55	1.14
Support Department Cost Allocations	11	3.51	1.04
Inventory Control	12	3.50	1.23
Productivity and Performance Evaluation	13	3.48	1.15
Controllable and Uncontrollable Variances	14	3.46	0.95
Cost-Volume-Profit Analysis	15	3.45	1.25
Cost/Managerial Accounting in Service Entities	16	3.42	1.18
Total Quality Management (TQM)	17	3.36	1.11
Accounting for Payroll	18	3.36	1.27
Comparison to Financial Accounting	19	3.34	1.07
Management Control Systems	20	3.32	1.00
Revenue Allocation and Customer Profitability Analysis	21	3.29	1.00
Divisional Performance Evaluation	22	3.29	1.06
Production Price and Efficiency Variances	23	3.28	1.11
Segment Profitability Analysis	24	3.28	1.21
Standard Costing	25	3.25	1.29
Master Budgets	26	3.24	1.19
Prime/Conversion Costs	27	3.20	1.18
Relevant Cost Analysis	28	3.19	1.04
Absorption/Variable Costing	29	3.19	1.08
Overhead Budget/Efficiency/Volume Variances	30	3.19	1.12

capital management; asset management; and tax analyses. Other senior-level subjects include divisional and productivity performance evaluations, cost-system development, pricing decisions, short-term planning, decision making under uncertainty, and behavioral aspects of budgeting.

IMA Members

Tables 3 and 4 show the 30 highest-rated subjects for staff and senior positions based on responses from IMA members. As with the overall findings, IMA members rated ethics and fraud as their number one choice of topical coverage. In fact, the IMA mem-

Table 4: Management Accounting Topical Coverage Selected by IMA Members for Senior Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE 5 = HIGH IMPORTANCE)		
	Rank	Senior Mean	Senior SD
Ethics and Fraud	1	4.45	0.93
Financial Budgets	2	4.41	0.89
Operating budgets	3	4.38	1.02
Overhead Allocation	4	4.32	0.80
Cost-Volume-Profit Analysis	5	4.30	0.99
Make, Buy, or Lease Decisions	6	4.26	0.92
Problem Solving Using Spreadsheets	7	4.26	0.92
Capital Budgeting	8	4.25	0.89
Working Capital Management	9	4.23	0.93
Problem Solving Using Commercial Software	10	4.20	0.94
Revenue Allocation and Customer Profitability Analysis	11	4.20	1.00
The Value of Information	12	4.19	0.85
Break-even Analysis	13	4.18	0.94
Variance Analysis	14	4.16	0.86
Relevant Cost Analysis	15	4.15	0.94
Assets Management and Tax Consequences	16	4.13	0.95
Master Budgets	17	4.13	1.09
Employee Compensation/Bonus Systems	18	4.12	0.92
Support Department Cost Allocations	19	4.12	1.02
Inventory Control	20	4.10	0.99
Productivity and Performance Evaluation	21	4.10	1.08
Divisional Performance Evaluation	22	4.09	0.86
Cost System Development	23	4.06	0.91
Nonfinancial Performance Measures	24	4.06	0.92
Short-term Planning	25	4.04	0.90
Management Control Systems	26	4.04	1.03
Pricing Decisions	27	4.02	1.16
Segment Profitability Analysis	28	4.00	0.95
Decision Making Under Uncertainty	29	4.00	1.01
Short-term Planning with Constraints	30	3.96	1.07

bers' ratings are consistent with the overall sample. In 24 out of 30 cases for the staff positions and 27 out of 30 cases for the senior positions, IMA member selections are the same as the overall results. The exceptions cited by IMA members that don't appear

on the overall list for staff positions are productivity measurement, divisional performance evaluation, segment profitability analysis, prime/conversion costs, relevant cost analysis, and overhead variances. For senior positions, the exceptions are support

Table 5: Management Accounting Topical Coverage Selected by AICPA Members for Staff Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE	5 = HIGH IMPORTANCE)	Staff	
	Rank	Mean	SD	
Problem Solving Using Spreadsheets	1	4.03	1.08	
Ethics and Fraud	2	3.97	1.13	
Problem Solving Using Commercial Software	3	3.89	1.03	
Break-even Analysis	4	3.80	0.99	
Comparison to Financial Accounting	5	3.76	1.07	
Overhead Allocation	6	3.63	0.98	
Operating Budgets	7	3.62	1.09	
The Value of Information	8	3.62	1.21	
Financial Budgets	9	3.61	1.18	
Absorption/Variable Costing	10	3.57	1.07	
Job Order Costing	11	3.53	1.28	
Variance Analysis	12	3.51	1.15	
Activity-Based Costing (ABC)	13	3.50	1.06	
Just-in-Time Inventory Methods (JIT)	14	3.50	1.08	
Manufacturing Cost Flows	15	3.47	1.03	
Cost-Volume-Profit Analysis	16	3.47	1.25	
Standard Costing	17	3.43	1.17	
Sales Price and Volume Variances	18	3.42	1.08	
Production Mix and Yield Variances	19	3.42	1.23	
Revenue Allocation and Customer Profitability Analysis	20	3.41	1.04	
Inventory Control	21	3.39	1.15	
Master Budgets	22	3.32	0.97	
Support Department Cost Allocations	23	3.32	1.13	
Flexible Budgets	24	3.30	1.00	
Flexible Budget Variance for Product-Related Costs	25	3.29	1.13	
Cost Behavior	26	3.27	1.10	
Assets Management and Tax Consequences	27	3.27	1.10	
Operation Costing	28	3.27	1.12	
Using ABC for Analyzing Customer Profitability	29	3.27	1.18	
Continuous Improvement	30	3.26	1.17	
Cost Systems Development	31	3.26	1.29	

department cost allocations, nonfinancial performance measures, and short-term planning with constraints.

AICPA Members

Tables 5 and 6 present the top-rated subjects for staff and senior positions, respectively, based on the

Table 6: Management Accounting Topical Coverage Selected by AICPA Members for Senior Positions Ranked by Mean Ratings

Subject	(1 = LOW IMPORTANCE	5 = HIGH IMPORTANCE)	Staff	
	Rank	Mean	SD	
Financial Budgets	1	4.63	0.71	
Operating Budgets	2	4.61	0.64	
Ethics and Fraud	3	4.61	0.72	
Flexible Budgets	4	4.43	0.75	
The Value of Information	5	4.39	0.79	
Master Budgets	6	4.36	0.76	
Problem Solving Using Spreadsheets	7	4.35	0.82	
Make, Buy, or Lease Decisions	8	4.34	0.81	
Break-even Analysis	9	4.31	0.76	
Behavioral Aspects of Budgeting	10	4.30	0.94	
Capital Budgeting	11	4.27	0.90	
Working Capital Management	12	4.27	0.96	
Assets Management and Tax Consequences	13	4.25	0.81	
Revenue Allocation and Customer Profitability Analysis	14	4.23	0.93	
Comparison to Financial Accounting	15	4.23	0.97	
Problem Solving Using Commercial Software	16	4.21	0.80	
Cost-Volume-Profit Analysis	17	4.21	1.09	
Strategy Implementation	18	4.20	1.08	
Inventory Control	19	4.18	0.80	
Divisional Performance Evaluation	20	4.11	1.06	
Cost System Development	21	4.09	0.92	
Management Control Systems	22	4.08	0.94	
Nonfinancial Information Analysis	23	4.08	0.97	
Pricing Decisions	24	4.08	0.98	
Decision Making Under Uncertainty	25	4.08	1.02	
Segment Profitability Analysis	26	4.06	1.10	
Productivity and Performance Evaluation	27	4.05	1.05	
Benchmarking	28	4.05	1.09	
Overhead Allocation	29	4.03	0.95	
Strategic Cost Management	30	4.03	1.14	
Short-term Planning with Constraints	31	4.00	0.83	
Sales Mix	32	4.00	0.89	
Cost Behavior	33	4.00	1.04	
Employee Compensation/Bonus Systems	34	4.00	1.07	

response from AICPA members. Comparisons of these responses to those of IMA members demonstrate that while there are areas of mutual interest between the two groups (18 of the top 30 topics are common choices for both IMA and AICPA members), the degree of perceived importance varies. For example, AICPA members do not rate ethics and fraud as high as IMA members do. Most subjects favored by AICPA members can be viewed as procedural topics, while IMA members prefer subjects that seem to be more oriented toward decision making. For example, the AICPAs list topics such as break-even analysis and variance investigation, while the IMAs list total quality management and divisional performance evaluation.

Comparison of the AICPAs' ratings with those of the overall results in Table 1 finds 23 topics appearing on both lists for staff positions. The other seven skills are procedural in nature, including activity-based costing, Just-in-Time inventory methods, variance computations, and determining how costs behave. There is more agreement in regard to senior positions. The two lists differ by only four topics, involving decision-oriented topical areas such as strategic cost management, benchmarking, and nonfinancial analysis.

A CALL FOR CHANGE

The results from this survey support the call for major changes to the management accounting curriculum. While the traditional management accounting courses remain important and relevant, several new subjects need to be included in the accounting curriculum. First, ethics education plays an important role in how the next generation of managers will choose to practice business. The after-effects of corporate scandals and the resulting court rulings and regulatory actions serve as a wake-up call that it is the responsibility of business professionals to understand what is right and that managers who operate out of self-interest can cause harm to society. Absent this training, college graduates are unlikely to comprehend the full range of job expectations in their new roles as business consultants and corporate managers.

Second, there is a greater demand for processing information, often at speeds never before imagined. The survey results demonstrate a general consensus

among practitioners that accounting graduates should be well-prepared to use computer technology and related software accounting programs, and accounting programs should focus on teaching a full range of spreadsheet applications and other relevant commercial software programs in their management accounting courses.

In addition to technical accounting knowledge, today's accounting graduates are expected to focus on developing their strategic and organizational skills in order to better prepare for the emerging corporate challenges. To better reflect the well-established changing role of the management accountant in the business environment, accounting programs should consider addressing a number of nontraditional subjects within their curricula, including working capital management, productivity and performance evaluation, asset management and tax consequences, productivity and performance evaluation, cost system development, pricing decisions, short-term planning with constraints, and segment profitability analysis.

After examining the topical coverage found by the previous research studies cited earlier, as well as the results of this survey, it appears that much of the knowledge and many of the skills presently lacking in management accounting education are among the topics that are rated as important by members of both IMA and AICPA.¹³ Additionally, the depth and breadth of the coverage provided by existing teaching materials need to be expanded, particularly for topics considered important to senior positions. To better prepare students interested in pursuing a career in management accounting, these topics require additional, more thorough coverage within accounting education.

The overall research findings demonstrate that the current accounting curriculum requires major revisions to both increase the extent of topical coverage as well as integrate interdisciplinary materials into management accounting education. ■

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ENDNOTES

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