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# **The Balanced Scorecard: A Potential Tool for Supporting Change and Continuous Improvement in Accounting Education**

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**ABSTRACT:** Rapid changes in the technological and competitive environment are posing serious challenges to accounting education. Meeting these challenges will require accounting educators and programs to undergo fundamental changes and to continuously seek ways to increase the value of their contributions. This article illustrates how the balanced scorecard may be used by accounting educators to stimulate, guide and sustain such continuous improvement efforts. Survey and interview responses from 69 accounting department heads are generally supportive of the balanced scorecard's potential applicability and benefits to accounting programs. These department heads also provide suggestions on the items that can comprise an effective balanced scorecard for an accounting department, as well as factors that can affect its successful implementation.

## **INTRODUCTION**

**I**n the past decade, both business education, in general, and accounting education, in particular, have faced intensive pressures for change. These challenges have resulted from a confluence of factors, including quantum leaps in computer and communications technology, structural changes in business organizations and processes (e.g., downsizing, reengineering and virtual corporations), and major shifts in student body demographics (e.g., increased proportions of adults seeking retraining or continuing education). Another force for change is the revamped accreditation standards of the AACSB—The International Association for Management Education (AACSB 1994a, 1994b). These standards require both business

and accounting programs to have well-articulated missions suited to their circumstances, explicit strategies to attain these missions and ongoing evaluation processes to ensure mission attainment and continuous improvement.

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The fundamental nature of these forces for change suggests that responding to them also would require a fundamental rethinking of programs and approaches. An example of efforts in this direction is the participation of 11 colleges and universities in a "Strategic Planning Partnership" funded by the Ernst & Young Foundation (Moore and Diamond 1995). For initiatives like these to generate meaningful results, the change process needs to be well designed and executed. Thus, in a recent article in this journal, Nelson et al. (1998) have proposed a 10-step-implementation process.<sup>1</sup> This process is based on the strategic management literature and is similar in spirit to, though more disaggregated than, the Ernst & Young model.<sup>2</sup>

The vastness of the strategic management literature suggests that many other models for managing change exist that also merit consideration. But as Nelson et al. (1998) and the AACSB's new accreditation standards recognize, performance measurement is an essential component of whatever change process is adopted. It can provide motivation and direction, give feedback on the effectiveness of plans and their execution, and help in strategy formulation and revision. The purpose of this article is to suggest the balanced scorecard as a tool for enhancing the success of accounting programs' strategic planning and continuous improvement efforts.

The remainder of this paper is structured as follows. The next section provides an overview of the balanced scorecard and discusses its potential applicability to accounting education. The section after that further elucidates the nature of the balanced scorecard by contrasting it

with existing approaches to evaluating academic programs. Subsequent sections summarize accounting department heads' responses to our survey and debriefing interviews on the potential usefulness of the balanced scorecard, the items that can form an effective scorecard for an accounting department and factors that can affect implementation success. A summary concludes the paper.

### **THE BALANCED SCORECARD AND ITS POTENTIAL APPLICABILITY TO ACCOUNTING EDUCATION**

The balanced scorecard is an integrated set of performance measures comprising both current performance indicators and drivers of future performance, and financial as well as nonfinancial measures. For managers of organizations, the function of the balanced scorecard is to provide a holistic view of what is happening both inside and outside the organization.

The balanced scorecard's key characteristic is that the included measures are linked to the entity's mission and strategy, and are explicitly designed to inform and motivate

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<sup>1</sup> The ten steps in Nelson et al.'s (1998) proposed process are: (1) Study your potential market; (2) Evaluate your raw materials (e.g., students); (3) Evaluate your resources; (4) Study your competition; (5) Develop your strategy (select your niche); (6) State your mission; (7) Design your product; (8) Design your production process; (9) Implement change; and (10) Monitor outcomes.

<sup>2</sup> The major steps in the Ernst & Young model included consideration of the environment, marketplace, competition and stakeholder needs in the context of SWOT (strengths, weaknesses, opportunities and threats) analysis. This SWOT analysis also considered the institution's distinctive capabilities, measurements, strategies and action plans (Nelson et al. 1998, 302).

continuous efforts toward their attainment (Hoffecker 1994; Kaplan and Norton 1992, 1993, 1996a, 1996b; Maisel 1992; Newing 1994, 1995). As such, the balanced scorecard is an integral part of the strategic planning process, and not just a system for tracking performance after the fact.

An effective balanced scorecard generally includes a mix of outcome measures and performance drivers. Using a manufacturing setting for illustrative purposes, examples of the former are high quality and speed, while defect rates and cycle times are examples of the latter. The latter measures communicate how the desired outcomes are to be achieved based on assumed causal relationships among objectives and measures. In this way, the balanced scorecard articulates a theory, or model, of the organization's causal chain of performance drivers and outcomes.

Furthermore, an effective balanced scorecard embodies a balance between diagnostic measures and strategic measures. The former help to monitor whether the organization remains "in control" and whether immediate intervention is required. In contrast, strategic measures are designed to evaluate success in achieving strategic goals. Thus, diagnostic measures capture the necessary "hygiene factors" that enable the organization to operate normally, while strategic measures help to ensure that short-term concerns are not overemphasized at the expense of the entity's strategic goals.

At the organizational level, developing the balanced scorecard involves identifying several key components of operations, establishing goals for these and then selecting measures to track progress toward these goals. The number and nature of compo-

nents can be expected to vary depending on the nature and strategy of the organization, though the following four components are typical:

- 1) *Customer Perspective* ("How do customers see us?"): This component tracks how well the organization is meeting the expectations of its customers.
- 2) *Internal Business Perspective* ("At what must we excel?"): This component focuses on the internal processes that the entity must perform well if it is to meet customers' expectations.
- 3) *Innovation and Learning Perspective* ("Can we continue to improve and create value?"): This component focuses on the infrastructure that the entity must build and sustain in order to ensure and enhance its ability to satisfy customers' expectations.
- 4) *Financial Perspective* ("How do we look to providers of financial resources?"): This component tracks how well the organization is translating its operational results into financial well being.

Thus far, discussions and reported applications of the balanced scorecard have been concentrated in the for-profit sector.<sup>3</sup> Among educational institutions, the only reported implementation that we could find was a strategic reformulation of the administrative functions at the University of California, San Diego

<sup>3</sup> A partial list of recent balanced scorecard adopters include AT&T, Brown and Root, Intel, 3Com, Mobil, Tenneco, KPMG Peat Marwick, Ernst & Young, Chemical Bank, All State Insurance Company, and CIGNA (Birchard 1995; Irvine 1993; Kaplan and Norton 1996b; Vitale et al. 1994).

(UCSD). According to a report of the National Association of College and University Business Officers (NACUBO 1996), in 1993 UCSD's senior management launched a balanced scorecard planning and performance monitoring system for 30 institutional (but not instructional) functions using three primary data sources: (1) UCSD's internal financial reports; (2) NACUBO benchmarks; and (3) faculty, staff and student customer-satisfaction surveys. This exercise was conducted under the framework of the university's vision, mission and values. Reported benefits and outcomes to date have included reorganization of the workload in the vice chancellor's area, revision of job descriptions with performance standards, introduction of continual training for user departments, ongoing customer assessments and increased responsiveness to communication needs through the use of technology.

Despite the favorable UCSD experience, the lack of reported balanced scorecard applications in educational institutions, especially in the instructional functions, may be taken to imply a lack of applicability. Indeed, educational institutions do have features that can make implementation of the balanced scorecard (and the strategic planning process of which it is part) more difficult than in for-profit entities. For example, whereas for-profit entities typically can use huge bonuses or other forms of compensation to reward performance, educational institutions rarely have such resources or latitude. When combined with the sanctity accorded to "academic freedom," this can limit the ability to promote change and/or continuous improvement.

Specifically related to the balanced scorecard, one also could debate who,

exactly, are the "customers" of a university. A case can be made for including students, employers, parents of students, alumni, nonalumni donors, research funding organizations, state governments, the community and taxpayers. One also could argue for inclusion of the faculty and staff. With the potential for such diverse views, gaining consensus on the definition of "customers" can be challenging, yet necessary, if an effective balanced scorecard is to be constructed.

But it also is possible that the dearth of reported balanced scorecard applications in the educational sector simply reflects a lack of awareness or understanding. In any case, as long as accounting programs will attempt change and improvement, exploring ways to improve this process would be worthwhile. It is in this spirit that we present this discussion of the balanced scorecard. Our belief in the balanced scorecard's potential applicability is based on two main factors. First, at least in the nature of operations, educational institutions are service organizations like banks and insurance companies, which have adopted the balanced scorecard with favorable reported results. More important, the survey and interview responses of 69 accounting department heads—who should be familiar with the educational environment—generally affirm that the balanced scorecard can be beneficial to their programs.

### **COMPARING THE BALANCED SCORECARD AND EXISTING APPROACHES TO RATING ACADEMIC PROGRAMS**

Comparing the balanced scorecard to the performance measurement approaches which underpin external ratings of academic programs

can further elucidate its unique features. Among the most widely publicized of such ratings are those in the media, such as *Business Week* and *U.S. News and World Report*. These focus primarily on entire programs or institutions (e.g., universities as a whole or business schools), or only list the top-rated programs. In contrast, other services, such as *The Gourman Report* and *Educational Ranking Annual*, provide ratings of specific disciplines.

Like the balanced scorecard, all of these external rating approaches use multiple criteria. *The Gourman Report* (Gourman 1993) uses a linear combination of 18 (differentially) weighted criteria to derive its ratings (e.g., total programs offered, faculty qualifications and productivity, quality of administration, computer facilities, research funding). In addition to issues of measurement (e.g., how to measure the quality of administration), the *Report* also cautions readers that because disciplines vary in their educational methodology, the significance given each criterion should vary from one discipline to another. It also emphasizes the limitations of combining complex data into a deceptively convenient numerical rating (Gourman 1993, 2-3).

The *Educational Ranking Annual* (Hattendorf 1996) even more explicitly recognizes the limitations of any one ranking methodology. It states that while educational rankings are usually based on complex measures (e.g., academic reputation, citation analysis, peer evaluations or perceptions, distinguished alumni, admissions selectivity, tuition, faculty salaries, library and computer facilities), none of these precisely reflects the institution's educational quality (Hattendorf 1996, x-xii). Rather than

selecting one ranking approach, the *Annual* provides separate rankings based on four groups of measures: (1) reputation rankings derived from the opinions of college and university presidents, deans, department chairpersons, senior scholars and others; (2) citation analysis; (3) faculty productivity, measured by the number of publications; and (4) statistical rankings derived from such information as endowment, library facilities and admissions selectivity.

Thus, existing ranking approaches do consider multiple facets of educational programs, many of which would seem appropriate even if an alternative approach (such as the balanced scorecard) were used. But unlike the balanced scorecard, these approaches do not select the various measures, nor do they organize them, based on a holistic or integrated system of performance drivers and diagnostic indicators. They also do not relate these measures to each institution's unique mission and circumstances. Because of these features, their usefulness for guiding individual programs toward continuous improvement and change would seem open to question.

#### **ACCOUNTING DEPARTMENT HEADS' VIEWS ON THE BENEFITS AND POTENTIAL COMPONENTS OF A BALANCED SCORECARD FOR ACCOUNTING PROGRAMS**

To investigate the potential applicability and benefits of the balanced scorecard to accounting education, we conducted a mail survey of 250 heads of U.S. and Canadian accounting departments. These departments were selected from the *Accounting Faculty Directory* (Hasselback 1997).

To be included, the department had to be a distinct entity in a school or college of business and to have ten or more faculty members.

### Survey Instrument and Procedure

The survey was mailed at the end of April 1997. The cover letter explained the purpose of the survey, followed by two pages that explained the nature of the balanced scorecard and provided a sample scorecard for a manufacturing company. Then the instrument presented five components of a potential scorecard for an accounting department. The first four of these were labeled with the headings presented earlier for a typical scorecard. For each of these components, the survey presented a list of potential goals (e.g., "Effective student placement") and for each goal, a list of potential performance measures (e.g., "Percent of students with job offer at graduation").<sup>4</sup> The fifth component was unlabeled, with blank spaces provided for both goals and measures.

Respondents were asked to suggest what components, goals and measures might form an effective balanced scorecard for their accounting department. They were asked to first consider the four labeled components, and to accept them as they were, or to write in changes that they considered to be appropriate. Then under each component that they considered appropriate for inclusion, they were asked to select from the lists of goals and associated measures provided, and/or to write in their suggested ones.<sup>5</sup> They also were asked to utilize the blank (fifth) component to introduce other aspects that they believed to be also essential. The final part of the survey sought selected back-

ground information about the respondents' department (e.g., size, location; see below), the extent to which their department has implemented a system like the balanced scorecard and the extent to which they believed that implementing the balanced scorecard can benefit their department.

Sixty-nine usable surveys (27.6 percent) were returned in May and June. Since the response rate was satisfactory for this type of study, we did not conduct a second mailing. We

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<sup>4</sup> The goals and performance measures listed in the instrument were identified using the following procedure. First, an initial list was compiled by the authors based on introspection and reading of the balanced scorecard and accounting education literatures. Then each author consulted his department head and three colleagues on the completeness and appropriateness of this list. The final list was jointly determined by the authors based on this feedback.

<sup>5</sup> To increase the respondents' motivation to think through their answers, we asked them to select or list no more than a total of five goals and ten measures for each component. This was aimed at precluding simply checking every item that we had listed. We recognize that this procedure could have constrained the range of their responses. An alternative was to simply provide blank spaces for all components, goals and measures. However, a pretest with three department heads revealed that responding to this format would likely take between 30 and 45 minutes. The approach that we selected was aimed at a lower time requirement (15-20 minutes) to achieve a more favorable response rate. For the same reason, we stopped short of asking the respondents to rank their selected goals and measures. As noted, we did include space for the respondents to insert items that they believed to be important. As reported, while none of the respondents suggested any components beyond the four that we had provided, many of them did write in numerous additional goals and measures. We interpret this as an indication that the respondents had taken the survey seriously. Also, no respondent identified any of the items that we had listed as being inappropriate.

did conduct a limited test for nonresponse bias by comparing the responses returned in May vs. June and found no noticeable systematic differences. While we cannot rule out the existence of nonresponse bias, the fact that our respondents included both individuals who expressed skepticism about the balanced scorecard as well as those who were quite excited about it, suggests that this may not be a significant issue. Even if it is, the views of such a large number of department heads from diverse institutions (see below) still should be of interest.

### **Sample Demographic Characteristics**

Of the 66 respondents who provided background information, the vast majority (60, or 90.9 percent) are in AACSB-accredited programs. In terms of location, 39 (59.1 percent) of the 66 departments are in or near a big city, 18 (27.3 percent) are away from a big city, and nine did not provide this information. Sixty-two (93.9 percent) of the departments have both graduate and undergraduate accounting programs, three (4.5 percent) have only an undergraduate program, and one has only graduate programs. In terms of number of majors, six respondents' departments (9.1 percent) have fewer than 100 accounting majors, 12 (18.2 percent) have 101 to 200 majors, 20 (30.3 percent) have 201 to 400 majors and 27 (40.9 percent) have more than 400 majors. These data show that a diverse set of accounting programs was included in the sample.<sup>6</sup>

### **Extent of Implementation and Benefit**

Responses were sought to these two questions: "To what extent has your department implemented some-

thing similar to the balanced scorecard?" and "To what extent do you think the balanced scorecard approach can benefit your department?" Both questions used a 10-point response scale. The anchors were 1 = "Not at all" and 10 = "Totally" for the first question, and 1 = "Not at all useful" and 10 = "Extremely useful" for the second.

Table 1 shows that for the 64 respondents who answered the first question, the mean for extent of balanced scorecard implementation was only 3.55, with 49 answers (76.6 percent) being in the 1-5 range. This finding is not unexpected, given the apparent slow pace of balanced scorecard adoption in the not-for-profit sector in general, and the dearth of reported implementations in educational institutions in particular. On the other hand, there were numerous responses (15, or 23.4 percent) in the 6-10 range, with 12 of these being either 7 or 8, and one being a "10." These latter responses suggest that in due course, a number of accounting programs will be in a position to share their experiences with the balanced scorecard or similar type of approach. Interestingly, and perhaps accounting for the higher-valued responses, several of the respondents with high numerical answers indicated that the revised AACSB accreditation standards have much in common with the balanced scorecard approach. We believe that this perception is correct, though we would emphasize the latter's emphasis on an integrative set of performance measures as a particularly distinctive feature.

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<sup>6</sup> Only two Canadian schools were in the sample. Their inclusion vs. exclusion did not significantly affect the thrust of the findings.

**TABLE 1**  
**Extent of Balanced Scorecard Implementation and Assessed**  
**Potential Usefulness to Accounting Departments**

**Panel A: Extent of Implementation**

	<u>Frequency</u>	<u>Percentage</u>
1 = "Not at all"	21	32.8
2	10	15.6
3	7	10.9
4	4	6.3
5	7	10.9
6	2	3.1
7	4	6.3
8	8	12.5
9	0	0.0
10 = "Totally"	1	1.6

n = 64

Overall mean = 3.55

**Panel B: Potential Usefulness**

1 = "Not at all useful"	5	8.1
2	0	0.0
3	2	3.2
4	3	4.8
5	9	14.5
6	8	12.9
7	10	16.1
8	15	24.2
9	6	9.7
10 = "Extremely useful"	4	6.5

n = 62

Overall mean = 6.45

Table 1 also shows that, despite the generally low levels of balanced scorecard implementation, the department heads were quite positive about the scorecard's potential ability to benefit their programs. For the 62 respondents who answered the second question, the mean response was 6.45, with 43 answers (69.4 percent) being in the 6–10 range. Of these, 25 were either 7 or 8, and 10 answers were either 9 or 10. On the other hand, there also were skeptics,

as indicated by the 19 respondents who answered in the 1–5 range.

We also explored whether responses to the two questions depended on specific departmental characteristics. A one-way analysis of variance (ANOVA) was performed using extent of implementation as the dependent variable. AACSB accreditation, location, program levels (e.g., undergraduate, graduate), and size category were the independent variables. The only statistically significant



independent variable was location, with departments in or near a big city having a lower mean level of implementation than their rural counterparts (3.08 vs. 5.24,  $F = 8.09$ ,  $p = 0.006$ ). A similar ANOVA was performed for the scorecard's assessed potential benefit, with extent of implementation added as a fifth independent variable. Again, the mean for departments in or near a big city was lower than that for their rural counterparts, though both are quite positive (6.38 vs. 7.67,  $F = 4.08$ ,  $p = 0.05$ ). In addition, and perhaps not surprisingly, extent of implementation was statistically significant, with the mean for departments in the 6–10 implementation levels significantly higher than that of departments in the 1–5 range (7.80 vs. 6.02,  $F = 7.12$ ,  $p = 0.01$ ).<sup>7</sup>

### **Suggested Scorecard Components, Goals and Measures**

Table 2 summarizes the goals and measures selected most frequently by the respondents out of those that we had listed in the survey. For brevity, it includes only goals from our provided list that had been selected by at least one-third of the sample. And for each goal, it reports only measures that had been selected by at least one-third of those who had chosen that goal.<sup>8</sup> While the respondents did volunteer a wide variety of additional goals and measures, none met these frequency criteria.<sup>9</sup>

### **Customer Perspective**

Table 2 shows that five goals were identified by at least one-third of the respondents as being useful: effective student placement (97.1 percent), quality instruction (94.2 percent), highly valued program (68.1 percent), quality academic advising (55.1 per-

cent) and flexible course scheduling (50.7 percent). For assessing student placement effectiveness, "percentage of students with job offers at graduation" and "number of companies recruiting on campus" are the two most frequently suggested measures. Two other measures, "graduates recruited by (the then) Big 6 firms" and "average starting salaries of graduates," also received substantial support. For instructional quality, five measures were most frequently identified: alumni evaluation, graduating student survey, accreditation, recruiter evaluation and professional exam-passing rate. For assessing whether the program is highly valued, "external ranking or ratings in the press" and "percentage of enrollment out of applications" were identified most often as useful yardsticks. "Student evaluation of advising" was singled

<sup>7</sup> Our data did not permit exploring the reasons for the location effect. Perhaps the list of explanatory factors would include the institutions' levels of funding, faculty and student selectivity, governance structure and more generally, mission and strategy. Evidence on this issue can improve understanding of how to increase the net benefits from balanced scorecard implementation.

<sup>8</sup> We did not isolate the suggestions of department heads with high levels of balanced scorecard implementation and/or assessed benefits, because there was no noticeable difference between them and the rest of the respondents. We also compared the responses of doctoral degree-granting institutions with those of nondoctoral-granting institutions. The results were quite similar except that the doctoral granting institutions reported slightly higher emphasis on quality research and number of faculty publications. Tables that separately report the responses of these subsets of department heads can be obtained from the first author.

<sup>9</sup> A complete tabulation of all the selected/volunteered goals and measures, along with the frequency with which each had been selected or suggested, is available from the following web site: <<http://www.sbpa.csusb.edu/ochange/table3.doc>>.

TABLE 2  
Frequency of Goals and Measures Identified by the Accounting  
Department Heads as Being Most Useful

Component One: Customer Perspective: How Do Customers See Us?					
List of Goals	n	% <sup>a</sup>	List of Measures	n	% <sup>b</sup>
Effective student placement	67	97.1	Percentage of students with job offer at graduation	61	91.0
			Number of companies recruiting on campus	41	61.2
			Graduates recruited by (the then) Big 6 firms	32	47.8
			Average starting salaries of graduates	31	46.3
Quality instruction	65	94.2	Alumni evaluation	51	78.5
			Graduating student survey	43	66.2
			Accreditation	38	58.5
			Recruiter evaluation	35	53.8
			Professional exam-passing rate	25	38.5
Highly valued program	47	68.1	External ranking or ratings in the press	30	63.8
			Percentage of enrollment out of applications	22	46.8
Quality academic advising	38	55.1	Student evaluation of advising	30	78.9
Flexible course scheduling	35	50.7	Student satisfaction survey	24	68.6
			Offering frequency of required courses	19	54.3
Component Two: Internal Business Perspective: At What Must We Excel?					
Quality assurance	49	71.0	Distribution of grades awarded	28	57.1
			Exit exam or student competency evaluation	26	53.1
			Prerequisite enforcement rate	23	46.9
Internship program	47	68.1	Number of internships available	42	89.4
			Number of companies involved	42	89.4
			Student evaluation	26	55.3
Cost efficiency	40	58.0	Faculty-to-student ratio	33	82.5
			Educational expenses per student	21	52.5
Optimal class size	40	58.0	Average class size for majors	33	82.5
			Average class size compared to other institutions	27	67.5
Unique or specialized curriculum	31	44.9	Number of faculty in the specialized area	21	67.8
			Number of other schools offering the same program	16	51.6
(Continued on the next page)					

TABLE 2 (Continued)

**Component Three: Innovation and Learning Perspective: Can We Continue to Improve and Create Value?**

<u>List of Goals</u>	<u>n</u>	<u>%<sup>a</sup></u>	<u>List of Measures</u>	<u>n</u>	<u>%<sup>b</sup></u>
Faculty professional growth	58	84.1	Number of faculty presentations at conferences	50	86.2
			Number of faculty publications	50	86.2
			Number of seminars attended by faculty	35	60.3
			Travel budget for conference attendance	21	36.2
Incorporating technology into teaching	55	79.7	Number of courses incorporating new technology	52	94.5
Innovation in teaching	51	73.9	Number of teaching innovation projects	43	84.3
			Number of teaching workshops attended by faculty	28	54.9
Curriculum innovation	42	60.9	Number of curriculum revisions in last five years	33	78.6
			Number of new courses offered in last five years	25	59.5
Partnering with accounting/business firms	37	53.6	Number of firms involved in joint activities	27	73.0
			Number of joint activities	24	64.9

**Component Four: Financial Perspective: How Do We Look to Providers of Financial Resources (Such as Governmental Agencies)? (Or: How Well are We Doing Financially?)**

Prosper	58	84.1	Annual giving to the department	55	94.8
			Amount of permanent endowment	41	70.7
			Amount of external grants	23	39.7
Succeed	55	79.7	Enrollment trend	48	87.3
			Test scores or GPA of new majors	46	83.6
Survive	47	68.1		42	89.4
			Level of student enrollment	42	89.4
			Funding per student	27	57.4

<sup>a</sup> Number of participants selecting this goal as a percentage of the entire sample of 69.

<sup>b</sup> Number of participants selecting this measure as a percentage of the number who had selected the associated goal.

out for assessing the academic advising function, while for measuring the flexibility of course scheduling, "student satisfaction survey" was suggested most often, followed by a direct measure of the "offering frequency of required courses." Interestingly, "service to the community," which was one of the listed items, was not selected with sufficient frequency for inclusion. In similar fashion, the faculty and staff were not identified as a major customer class, even though a case can be made that this group's welfare is likely to affect how well the other customer classes are served.

### ***Internal Business Perspective***

For the internal business component, five goals were affirmed by at least one-third of the respondents: quality assurance (71.0 percent), internship program (68.1 percent), cost efficiency (58.0 percent), optimal class size (58 percent) and unique or specialized curriculum (44.9 percent). As with the customer perspective, a variety of measures are suggested for each goal. For example, three measures of quality assurance were each named by at least one-third of the respondents who had affirmed this goal: distribution of grades awarded, exit exam or student competency evaluation and prerequisite enforcement rate.

### ***Innovation and Learning Perspective***

Five goals were most often selected by the respondents: faculty professional growth (84.1 percent), incorporating technology into teaching (79.7 percent), innovation in teaching (73.9 percent), curriculum innovation (60.9 percent) and partnering with accounting/business firms (53.6 percent). For monitoring

faculty professional growth, three measures were considered to be especially useful: number of faculty presentations at conferences, number of faculty publications and number of seminars attended by faculty. For tracking success in incorporating technology into teaching, the number of courses incorporating new technology was considered to be especially appropriate. A wide variety of measures was suggested for measuring attainment of the other goals in this component, ranging from the number of teaching innovation projects, to number of curriculum revisions in the past five years, to the number of accounting/business firms involved in joint activities with the department.

### ***Financial Perspective***

"To prosper" was the most frequently selected goal (84.1 percent), followed by "to succeed" (79.7 percent) and "to survive" (68.1 percent). For measuring prosperity, annual giving to the department and amount of permanent endowment were considered useful measures by a majority of respondents, with amount of external grants also receiving considerable support (39.7 percent). To measure financial success, enrollment trend and test scores or GPA of new majors were viewed as particularly useful; while for survival, the most often suggested indicators were level of student enrollment and funding per student.

Thus, table 2 shows that a wide variety of goals and measures can be used to construct the balanced scorecard for an accounting program. Since each accounting program has its unique mix of circumstances and mission, copying the scorecard of another without change is unlikely to be

optimal. Indeed, by aggregating the responses across multiple departments, the balanced scorecard in table 2 has ignored this critical design factor.<sup>10</sup> Thus, this table should be viewed only as an illustration of the range of possibilities in designing a balanced scorecard.

### ***Balanced Scorecards for Individual Department Members***

Since attaining the overall goals of the program requires inputs from each member, balanced scorecards also need to be designed for individual department members. We see no reason why all individual scorecards need to be identical. The goals and needs of any accounting program are many and varied, and skills, talents and interests also vary across individuals. To attain the greatest success as a whole requires accounting programs to exploit these individual differences and to seek and create synergy among its members. Thus, unlike a golf team, where the team score is simply the sum of individual team members' scores, an accounting department is more like a basketball team, where the team outcome depends on coordination and cooperation, in addition to specialization among team members. Accordingly, while individual balanced scorecards need to be consistent with overall organizational strategies, goals and measures, there also needs to be flexibility in accommodating individual strengths and weaknesses.

### ***Debriefing Interviews***

To probe whether the department heads had further concerns and comments, telephone interviews were conducted with 10 participants from the respondent pool. These were selected to cover the full range

of views regarding the potential benefits of the balanced scorecard. One week before the interview, each subject was sent a copy of a draft paper summarizing the research results. Also enclosed was a set of 12 questions to be addressed in the interview (exhibit 1).<sup>11</sup>

Regarding whether a balanced scorecard can communicate an accounting department's goals and objectives better than the traditional mission and goal statement, most (8/10) interviewees affirmed in principle the superiority of the balanced scorecard. But they also cautioned that this superiority depended on how well the grouping of goals and objectives reflects the department's mission, goals and priorities. In other words, the department heads thought that a carefully constructed scorecard had the potential to be a better tool, but realizing this potential would depend on the department's ability to construct an appropriate instrument.

The majority of interviewees (7/10) also affirmed the importance of balancing goals and objectives and believed that, theoretically, the balanced scorecard should help rather than hinder attainment of such balancing. But again, they emphasized

<sup>10</sup> Our omission of questions on strategy was a conscious choice. Strategy is a multifaceted construct (Kotha et al. 1995). With an anticipated limited sample size, we did not think that placing the respondents into strategy categories and then trying to discern relations between their strategies and balanced scorecards would have yielded meaningful results. This consideration led us to focus on illustrating the potential breadth and scope of the balanced scorecard.

<sup>11</sup> We are indebted to one of the anonymous reviewers for many of the suggested questions. The remainder was based on discussions and critiques of the balanced scorecard in the literature (e.g., Kurtzman 1997).

**EXHIBIT 1**  
**Debriefing Questions Used in Interviews**

1. Do you think that the balanced scorecard communicates an accounting department's goals and objectives better than the traditional mission and goals statements? In what ways is it better? Worse?
2. How important do you think it is to balance an accounting department's goals and objectives? To what extent and in what ways do you think the balanced scorecard helps or hinders this balancing?
3. To what extent do you think that the four components listed in our report encompass the essential goals and objectives for an accounting department? If you think that there are major omitted goals and objectives, under what label(s) would you classify such goals and measures?
4. To what extent do you believe that the four components we suggested are interlocked so that the success of the second (internal operations) and third components (learning and innovation) will lead to success with the first (customer satisfaction) and the fourth (financial) components?
5. Do the goals and measures presented by us include the key leading indicators for success in an accounting program so that departments will know at an early stage that they are on the right track to where they want to go?
6. Do you think that the performance measures in the balanced scorecard can be measured with affordable costs?
7. How easily do you think the measures in the balanced scorecard can be undermined in the implementation phase to reduce the effectiveness of the balanced scorecard system?
8. Do you believe that there are downsides to using diverse multiple performance indicators? Could you elaborate?
9. Do you think that some of the measures in the balanced scorecard may severely contradict each other? If so, what do you think can be done to overcome this problem?
10. How much change is necessary in your department before a balanced scorecard approach can be implemented? Could you elaborate on the nature of these needed changes?
11. Compared to your department's current performance evaluation system, do you think that there is a lot to be gained if a balanced scorecard is successfully implemented? What would be the major types of benefits to your department?
12. Overall, do you think that the gains will outweigh the costs if an accounting department were to implement the balanced scorecard?

that this depended on how well the scorecard is constructed. One interviewee indicated that balancing goals and objectives can also appear in well-constructed traditional mission and goal statements; therefore, the outcome depends not only on which approach is selected, but also on how well it is carried out.

As to whether table 2 encompasses the essential goals and objectives, all

interviewees agreed that it does. However, one interviewee thought that the definition of the "customer" in table 2 was too narrowly focused on students and employers. Another interviewee indicated that some goals and measures could be assigned to a fifth component entitled "external business perspective," featuring a measurement of department/business community partnership and of

"employer excellence" that reflects the quality of firms recruiting on the campus.

The interviewees were less certain whether the four components of the balanced scorecard are interrelated or independent. Four department heads believed that they are interlocking; three believed that it is an empirical question; and the remaining three gave some specific reasons for doubt. One interviewee considered the four components to be "related," but not to the extent of being "interlocked," because he thinks that students are surprisingly resilient to treatment: No matter what a teacher does, the good students always succeed and the bad students tend to fail. Another department head commented that if the customers are misidentified, then the customer component will not be interlocked with the other three components. Yet another interviewee argued that the first component should be "student learning" rather than "customer satisfaction"; otherwise the causal relationships among the components would not hold well.

Does table 2 include all the main leading indicators for accounting program success? Interviewees' answers to this question paralleled the previous question: four were affirmative, three were unsure, and three were somewhat doubtful. One interviewee commented that in the educational environment, every action takes a long time to yield results; for example, the effect of a curriculum change often takes four or five years to be fully manifest. Another department head commented that aside from accreditation, nothing else seems to have short-term effects in universities or colleges. Still another commented that an early indicator—working

papers by faculty—was left out of table 2.

Almost all of the interviewees (9/10) agreed that the performance indicators in table 2 can be measured with affordable costs because many of them are already in use under the traditional approach. One interviewee did indicate that collecting data on some of the measures would mean extra workload for the faculty or the department, and he did not think that his department had the financial resources for it. As to the potential for the proposed performance measures to be undermined in the implementation phase, the interviewees did not think that this was a unique problem of the balanced scorecard approach. They also thought that as long as multiple measures are used, this problem can be minimized.

Regarding the potential downside of using multiple measures, most of the interviewees (7/10) thought that this would not be a problem as long as the measures are clearly defined and not overlapping, and their weights agreed to beforehand. One interviewee commented that even if there is a downside, the benefit of multiple measures still outweighs the cost. The interviewees also did not believe that there are severe contradictions among the goals and measures in table 2. Five commented that there are always trade-offs among multiple goals, such as cost efficiency vs. optimal class size, or quality vs. operational efficiency, but these are not unique to the balanced scorecard approach.

On the issue of how much change is needed to implement a balanced scorecard, four interviewees felt that no major changes are needed because many of the measures are



already collected under their departments' current systems. The other six, however, felt it difficult to motivate faculty to take any strategic-planning exercise seriously, since faculty consider this the administrators' job. These department heads felt that to implement the balanced scorecard successfully, the performance measures need to be tied to salaries, which would require major institutional changes, particularly in public universities. On the issue of how much would be gained from a successful balanced scorecard implementation, the interviewees were divided. Half thought that there would be substantial gains, particularly in tracking the progress of strategic planning and in communicating the goals and objectives to the faculty. The other half was more reserved. In part, this was due to some of their departments already having initiated a program of change ("It is comparable with our current Ernst & Young model.") though the more representative statement was that "without tying the performance measures to salaries or compensation, the benefits will be limited."

Overall, will the gains of implementing the balanced scorecard outweigh the costs? Seven interviewees answered in the affirmative, while the remaining three were either not sure or skeptical. Two believed that this is an empirical question—only time will tell. The remaining department head was particularly emphatic: "It will be a huge risk if it cannot be tied with a reward system or structure, because at the end you might lose all the faculty morale without actually accomplishing anything."

## SUMMARY

Accounting educators and programs increasingly are seeking effective responses to the challenges of a rapidly changing technological, economic and social environment (Moore and Diamond 1995; Nelson et al. 1998). Regardless of the change process adopted, performance measurement is essential for providing motivation and direction, and for giving feedback on the effectiveness of plans and their execution.

The balanced scorecard approach, which has been adopted by many for-profit organizations, merits consideration as a means to stimulate, focus and sustain continuous improvement efforts in accounting programs. As an integral part of the strategy-formulation process, developing a balanced scorecard can improve communication and increase focus on the key success variables. And as a system of performance measurement, it can provide timely feedback on the organization's as well as its constituents' success in attaining its goals.

The accounting department heads that we surveyed indicated that, like other management tools, the balanced scorecard has both strengths and weaknesses. But on the whole, they were quite positive about its potential benefits to accounting programs. These department heads also suggested components, goals and measures that can form an effective balanced scorecard for an accounting program. While each program has to design its own scorecard consistent with its mission and circumstances, these suggestions can be a useful demonstration of the room for creativity in this process.

In considering whether to adopt the balanced scorecard approach, it is important to note some key challenges



in its application. First, the balanced scorecard embodies an implicit or explicit model of the organization: what are the key outcomes and outcome drivers, and how do these variables interrelate at a point in time as well as across time (Kurtzman 1997)? As the department heads observed, careful construction and evaluation of this model is essential if the balanced scorecard is to provide guidance and feedback toward the desired outcomes. Second, developing and implementing the balanced scorecard can be very time-consuming. An effective design and implementation process should include at least four related phases: (1) Translating the vision and gaining consensus; (2) Communicating the objectives, setting goals and linking strategies; (3) Setting targets, allocating resources and establishing milestones; and (4) Feedback and learning. Experiences from the for-profit sector suggest that completing this process can take up to two years or more (Kaplan and Norton 1996a, 1996b). Third, to the extent that the scorecard includes measures which require subjective judgment, there may be concerns about measurement bias, reliability and susceptibility to manipulation.

However, these concerns are not unique to the balanced scorecard approach. Deriving a mission statement and translating that into goals and

actions, also implies a model of the organization, in addition to requiring substantial time commitments. The current movement toward using both financial and nonfinancial performance measures also makes issues of measurement accuracy and reliability unavoidable. And in responding to these challenges, accounting educators are not operating in a vacuum. Apostolou (1999), for example, assists in providing access to an extensive literature on measuring and modeling student learning outcomes. Likewise, reviews by Rebele et al. (1998a, 1998b) provide valuable guidance to extant knowledge about a wide range of curriculum, educational technology, student and faculty issues.

Ultimately, in evaluating the balanced scorecard vs. other means of supporting change and improvement, it is important to recognize that all approaches have strengths and weaknesses. The key question is not which method is perfect. Rather, it is which has the greatest excess of benefits over costs, including those arising out of its imperfections. The answer to this question necessarily depends on each institution's situation and aspiration. This paper's discussion of the balanced scorecard, along with the insights from departmental chairs, can add to the tools for initiating, guiding and sustaining continuous improvement in accounting education.

#### REFERENCES

- AACSB—The International Association for Management Education. 1994a. *Standards for Business Accreditation*. St. Louis, MO: AACSB.
- . 1994b. *Standards for Accounting Accreditation*. St. Louis, MO: AACSB.
- Apostolou, B. 1999. Outcomes assessment. *Issues in Accounting Education* (February): 177–197.
- Birchard, B. 1995. Making it count. *CFO: The Magazine for Senior Financial Executives* 11 (10): 42–51.

- Gourman, J. 1993. *The Gourman Report: A Rating of Undergraduate Programs in American and International Universities*. Los Angeles, CA: National Education Standards.
- Hasselback, J. 1997. *Accounting Faculty Directory*. Upper Saddle River, NJ: Prentice Hall.
- Hattendorf, L. C. 1996. *Educational Rankings Annual*. Detroit, MI: Gale Research Inc., ITP.
- Hoffecker, J. 1994. Using the balanced scorecard to develop companywide performance measures. *Journal of Cost Management* 8 (3): 5-17.
- Irvine, J. 1993. The man with 20/20 vision. *Accountancy* 112 (12): 42.
- Kaplan, R. S., and Norton, D. P. 1992. The balanced scorecard—Measures that drive performance. *Harvard Business Review* 70 (1): 71-79.
- , and ———. 1993. Putting the balanced scorecard to work. *Harvard Business Review* 71 (5): 134-142.
- , and ———. 1996a. Using the balanced scorecard as a strategic management system. *Harvard Business Review* 74 (1): 75-85.
- , and ———. 1996b. *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Kotha, S., Dunbar, R., and A. Bird. 1995. Strategic action generation: A comparison of emphasis placed on generic competitive methods by U.S. and Japanese managers. *Strategic Management Journal* 26 (5): 621-635.
- Kurtzman, J. 1997. Is your company off course? Now you can find out why. *Fortune* 135 (3): 128-130.
- Maisel, L. S. 1992. Performance measurement: The balanced scorecard approach. *Journal of Cost Management* 6 (2): 47-52.
- Moore, M. R., and Diamond, M. A. 1995. *The Challenge of Change in Business Education*. New York, NY: Ernst & Young LLP.
- National Association of College and University Business Officers (NACUBO). 1996. <<http://www.nacubo.org>>.
- Nelson, I. T., J. A. Bailey, and A. T. Nelson. 1998. Changing accounting education with purpose: Market-based strategic planning for departments of accounting. *Issues in Accounting Education* 13 (2): 301-326.
- Newing, R. 1994. Benefits of a balanced scorecard. *Accountancy* 114 (1215): 52-53.
- . 1995. Wake up to the balanced scorecard. *Management Accounting, London (MAC)* 73 (3): 22-23.
- Rebele, J., B. Apostolou, F. Buckless, J. Hassell, L. Paquett, and D. Stout. 1998a. Accounting education literature review (1991-1997), part I: Curriculum and instructional approaches. *Journal of Accounting Education* 16 (1): 1-51.
- , ———, ———, ———, ———, and ———. 1998b. Accounting education literature review (1991-1997), part II: Students, educational technology, assessment, and faculty issues. *Journal of Accounting Education* 16 (2): 179-245.
- Vitale, M., S. C. Mavrinac, and M. Hauler. 1994. DHC: The chemical division's balanced scorecard. *Planning Review* 22 (4): 17, 45.