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IS accreditation in AACSB colleges via ABET

Thomas S. E. Hilton

Management Information Systems
University of Wisconsin—Eau Claire
hiltonts@uwec.edu

Bruce Wai Ning Lo

Management Information Systems
University of Wisconsin—Eau Claire

Abstract:

The development of ABET/CAC accreditation standards for IS programs presents an excellent opportunity for IS programs in AACSB-accredited business schools to improve their perceived quality and credibility. We argue that neglect by AACSB of IS/IT content has prompted this preemptive move on the part of ABET/CAC. A comparison of AACSB and ABET/CAC accreditation standards finds them to be generally quite compatible. Ironically, our survey of IS program leaders in AACSB-accredited business schools found familiarity with and interest in ABET/CAC standards to be just emerging. Although compliance with the ABET/CAC standards is evidently relatively high among most programs, understanding of potential benefits of accreditation is quite low. Also quite low is understanding of how colleagues might react to accreditation efforts.

Keywords: Accreditation, Management Information Systems, MIS, IS curriculum, Association for the Advancement of Collegiate Schools of Business, AACSB, Accreditation Board for Engineering and Technology, ABET, Computing Accreditation Commission, CAC

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Introduction

Accreditation is a time-honored, officially recognized method of promoting the quality of academic programs in higher education [Council for Higher Education Accreditation, 2003]. Reputable higher education programs in the USA are accredited by at least one agency officially sanctioned by the U.S. Department of Education [U.S. Department of Education Office of Postsecondary Education, 2002]. For instance, universities are accredited by regional bodies such as the North Central Association of Colleges and Schools [Higher Learning Commission, 2004], and many colleges of business are accredited by the Association to Advance Collegiate Schools of Business [AACSB International, 2004d]. These credentials are regarded as essential in maintaining the credibility and quality of academic programs.

While higher education accreditation is generally conferred at the institution and college level, some individual schools or departments also have the opportunity to earn accreditation of specific programs. For instance, schools of nursing can be accredited by the Commission on Collegiate Nursing Education [American Association of Colleges of Nursing, 2003], AACSB International offers special accreditation to accounting programs [AACSB International, 2004c], and the Accreditation Board for Engineering and Technology (ABET) offers a number of program-level accreditations, the newest of which is for information systems programs [ABET, 2003a]. These special program accreditations are widely perceived to confer added desirability on the degrees thus accredited. Evidence of this view may be found from a variety of sources: (a) the existence of multiple accrediting bodies for computing and business programs, e.g. the International Assembly for Collegiate Business Education [IACBE, 2006], and the Association of Collegiate Business Schools and Programs [ACBSP, 2006]; (b) creation of a vice presidency for accreditation on the AIS Council in 2004 [AIS, 2006]; and (c) research dealing with the accreditation of Information Systems programs [e.g., Impagliazzo & Gorgone, 2002].

AACSB And ABET Accreditation

What is the relationship between college accreditation and program accreditation? Under what circumstances is it desirable to add program accreditation to college accreditation? The research here reported aims to address these questions in the context of MIS programs in business schools.

AACSB Accreditation

AACSB International accredits undergraduate and graduate programs in business. The recently revised AACSB Standards for Business Accreditation [AACSB International, 2004d, pp. 3, 15] contain the content areas typical of AACSB undergraduate and graduate business curricula:

1. accounting,
2. business law,
3. decision sciences,
4. finance (including insurance, real estate, and banking),
5. human resources,
6. management,
7. management information systems,
8. management science,
9. marketing,
10. operations management,
11. organizational behavior,
12. organizational development,
13. strategic management,
14. supply chain management (including transportation and logistics), and
15. technology management.

ABET Accreditation of MIS Programs

Item 7, management information systems (MIS or IS), and item 15, technology management, in the above list were absent in older standards; indeed, information technology was hardly mentioned [cf AACSB International, 2001]. References to MIS content were also conspicuously absent from publicly circulated drafts of the current standards, most notably the last draft released for comment before adoption. Because of this, the Executive Council of the Association for Information Systems (AIS, the largest and arguably most influential IS academic society) published "What every business student needs

to know about information systems" [Ives et al., 2002] and delivered a copy to AACSB. One telling passage from that paper reads thus:

We fear that failure to recognize the essential importance of information technology and systems might eventually lead to the migration of information technology expertise and education out of the business school (p. 470).

This was no empty threat. Long ambivalence of the AACSB toward IS content has motivated the creation of special IS accreditation standards by the Accreditation Board for Engineering and Technology (ABET), the body responsible for accrediting computer science and engineering programs [ABET, 2004]. With this has also arisen a movement to house IS with other "computing" departments such as computer science, computer engineering, and electronics engineering in a "College of Computing" or other similarly named entity (e.g., the School of Communications and Information Systems at Robert Morris University, the College of Computing at Georgia Institute of Technology, the College of Computing Sciences at the New Jersey Institute of Technology, etc.).

Value of MIS Program Accreditation

We join Ives et al. in maintaining that the most desirable location for MIS programs is in the business school, to provide "business graduates with [adequate] education in a major change lever" and "to ensure that a large number of technology professionals are adequately educated in basic business concepts" (p. 472). However, from this assertion arises the question of the value of ABET accreditation of IS programs in AACSB-accredited business schools. A natural first assumption is that ABET accreditation would only increase the credibility and quality of both the department and the college. However, the controversial genesis of this MIS accreditation presents interesting questions:

1. Do the requirements of ABET accreditation complement or conflict with those of AACSB?
2. What do business school and IS faculty and administrators know about the ABET standards?
3. How do business school and IS faculty and administrators view the ABET standards?
 - a. As a way to improve IS programs?
 - b. As unreasonable—either trivially simple or unfeasibly hard?
 - c. As a backlash against AACSB?
 - d. As a prelude to creating a College of Computing?
 - e. As something else altogether?

These questions are the subject of this research. We addressed question 1 by inspecting the two standards, and we report the result of that inspection in section III. We addressed questions 2 and 3 by polling IS program leaders in AACSB-accredited business schools, and we report the results of that effort in section IV.

Comparing The Requirements

With regard to MIS programs, do the AACSB and ABET accreditation requirements complement or conflict with each other? To answer that question, we address three particulars: the scope and applicability of each standard, the method of applying each standard, and the actual guidelines within each standard.

Scope and Applicability

AACSB: AACSB accreditation applies in aggregate to all business-oriented courses and programs at an institution, and accreditation is conferred on the institution as a whole, not on any particular unit within it [AACSB International, 2004d, p. 3]. Of particular note is this statement:

A set of learning goals for the BSBA [bachelor of science in business administration] degree can be provided; goals for each major (while they may, or may not, be developed for the school's use) would not be required for accreditation review purposes (p. 57).

This clarifies the scope of AACSB accreditation as extending up to, but not into, individual majors. That is, AACSB accreditation includes review of the so-called "business core" or "common body of knowledge" required of all business graduates, but it does not include review of requirements for specific majors, e.g., the MIS major.

ABET: ABET accredits specific programs in four areas: engineering, engineering technology, computing, and applied science. The computing area is further divided into computer science and information systems, with separate sets of guidelines for each. The computing accreditation guidelines are developed and maintained by the Computing Accreditation Commission (CAC) within ABET [Gorgone 2003, 2004]. The scope of all ABET accreditation efforts is succinctly stated as follows:

Educational programs leading to degrees rather than institutions, departments, or degrees are accredited [ABET 2003b, p. 3].



In contrast, then, to the institutional scope of AACSB, ABET accreditation applies to specific course sequences such as the MIS major within a BSBA program (the BSBA potentially containing other, non-ABET-relevant majors or programs as well).

Comparison: Without belaboring the point, then, it appears clear that the AACSB and ABET accreditation standards are not only compatible in scope and applicability but are actually complementary, ABET picking up where AACSB leaves off.

Method

We summarize the method each agency uses to confer its accreditation in Table 1 for convenient comparison [AACSB International, 2004b; ABET, 2003b]:

Table 1. Comparison of AACSB and ABET Accreditation Methods	
AACSB	ABET
Membership	N/A
Application	Application
Pay ~\$20,000 plus \$3,500 per year	Pay ~\$7,500 then \$230 per year
Preparation: Pre-candidacy, Candidacy	Preparation
Self Evaluation	Self-Study
On-Site Peer Review	On-Site Visit (can include objective observers)
Notification Report	Notification Report
Annual Reporting	Interim reviews if prescribed in Report
Five-year Reaffirmation	Six-year Renewal (two-year if prescribed)

Table 1 shows that the methods are comparable. Differences exist, but none conflict.

Guidelines

AACSB: The guidelines within the AACSB accreditation standards are complex, and we encourage readers to study them independent of this report. For present comparison purposes, we summarize them thus:

1. Strategic Management: mission statement, mission appropriateness, student mission, continuous improvement, financial strategies
2. Participants: student admission/retention, staff, faculty, support planning, career dev., school culture, individual faculty responsibility, individual student responsibility
3. Learning: core content specifics, undergraduate education, master's education, doctoral education

ABET: As with AACSB, the guidelines within the ABET standards are complex, and we encourage readers to study them independent of this report. For present comparison purposes, we summarize them thus:

1. *Objectives & Assessments:* documented, appropriate educational objectives; mechanisms in place to measure achievement of objectives
2. *Students:* have timely access to courses and faculty, meet program requirements at graduation
3. *Faculty:* current, active, qualified; majority with terminal degrees, some with an IS doctorate
4. Curriculum:
 - a. At least 30 semester-hours of information systems topics
 - b. At least 15 semester-hours of business topics
 - c. At least 9 semester-hours of quantitative analysis¹
 - d. At least 30 semester-hours of general education
5. *Technology Infrastructure:* adequate student and faculty computing resources
6. *Institutional Support and Financial Resources:* sufficient to continue the program throughout the six-year accreditation period
7. *Program Delivery:* enough faculty to teach curriculum
8. *Institutional Facilities:* adequate libraries, classrooms, faculty offices

Comparison: While the preceding summaries are admittedly general, we can comment on convergence and divergence between them. We first describe two points of divergence. First, the AACSB standards contain relatively more prescription of management processes. Second, the ABET standards contain relatively more prescription of course content. However, we find no conflict in either point of divergence.

¹Guidelines that will take effect in 2008 reduce this quantitative analysis requirement to 6 semester-hours [ABET 2005].

We also note a number of points of convergence between the standards: General AACSB learning goals complement specific ABET curriculum specifications; AACSB business core and ABET general education requirements are compatible; and the student, faculty, facilities, finance, and technology standards are evidently similar.

Summary of AACSB and ABET Comparisons

To summarize, we find AACSB and ABET accreditation requirements to be compatible. (A possible conflict in quantitative analysis requirements that existed with early versions of the ABET requirements, was reconciled in the latest version of ABET criteria, to take effect in 2008.)

IS Program Leader Survey

To begin to understand AACSB faculty and staff views on ABET accreditation of MIS programs, we conducted a survey of IS program leaders in AACSB business schools. We chose to survey IS program leaders because preliminary inquiry indicated that other business school members would have very little knowledge of ABET and because IS program leaders bear the majority of the burden for ABET/CAC IS accreditation efforts.

Population frame, sample, Method

To generate a population sampling frame for the study, we started with the list of 451 accredited business schools published by AACSB [AACSB International, 2004a]. We visited the web site of each school and attempted to identify an information systems program (under any recognizable name, see Table 4 below); this yielded the population frame of 400 AACSB-accredited business schools with IS programs. From the web sites, we also obtained email and postal addresses for the leader of each program (whoever was recognizably in charge, see Table 3 below). We then attempted a census of our 400 AACSB-MIS program leaders by emailing each of them a request to complete our web-based questionnaire. We mailed a paper follow-up to each of them three weeks later.

Instrument

A questionnaire was developed and validated via a pilot test (reported in Hilton and Stone, 2003). The Web-based version of this questionnaire is available for inspection at <http://www.uwec.edu/cob/esurveys/ISaccred.htm>.

Response Rate

Of the 400 IS program leaders polled, 112 responded, for a response rate of 28%. (All responded via the Web; no responses to the paper follow-up were received.) This raises the question of nonresponse bias. Since the questionnaire was anonymous, identifying respondents or nonrespondents with whom to check for possible bias was impossible. However, we believe the demographics gathered on the questionnaire allow the reader to construct a fairly accurate understanding of the type of population represented by the respondents.

All 112 responses provided data for some questionnaire items. Although only 100 responses were complete, we included all responses received for an item in the analysis; incomplete questionnaires were not disqualified.

Demographics

We gathered a number of demographics to describe the respondents. These are presented in Tables 2 through 7:

Table 2. Academic Rank			Table 3. Administrative Level		
Rank	Freq.	Pct.	Level	Freq.	Pct.
Professor	67	61.5%	Department	83	79.8%
Associate Professor	33	30.3%	College	14	13.5%
Assistant Professor	3	2.8%	Department Subunit	3	2.9%
Instructor	2	1.8%	University	2	1.9%
Administrator	1	0.9%	None	2	1.9%
Area Chair	1	0.9%	Subtotal	104	100.0%
Director and Faculty	1	0.9%	No Response	8	
Lecturer	1	0.9%	Total	112	
Subtotal	109	100.0%			
No Response	3				
Total	112				



Table 2 shows that nearly $\frac{2}{3}$ of the respondents reported the rank of full professor, and over $\frac{9}{10}$ reported being either full or associate professor. This is consistent with expectations given the population of interest.

Table 3 shows the great majority of respondents as department-level administrators, which again is consistent with the sample surveyed. About a fifth of the respondents reported occupying a different administrative level.

Table 4. Department Name		
Name	Freq.	Pct.
Management Information Systems	34	31.8%
Computer Information Systems	19	17.8%
Accounting/Information Systems	13	12.1%
Decision Sciences/Information Systems	14	13.1%
Business Information Systems	9	8.4%
Computer Science	6	5.6%
Information Technology	4	3.7%
Business	4	3.7%
Electrical/Computer Engineering	1	0.9%
Marketing	1	0.9%
Operations Research/Information Systems	1	0.9%
Supply Chain/Information Systems	1	0.9%
Subtotal	107	100.0%
No Response	5	
Total	112	

Table 4 shows that there is still a wide diversity of opinion on the appropriate name for IS departments, a trend that has existed since the inception of the field. However, MIS and CIS together accounted for about half the responses.

Table 5. College Name		
Name	Freq.	Pct.
Business	107	97.3%
Computing	0	0.0%
Science	0	0.0%
Other	3	2.7%
Subtotal	110	100.0%
No Resp.	2	
Total	112	

Table 6. Age in Years		
Age	Freq.	Pct.
> 50	74	71.8%
41 - 50	26	25.2%
30 - 40	3	2.9%
< 30	0	0.0%
Subtotal	103	100.0%
No Resp.	9	
Total	112	

Table 7. Present Accreditation		
Accreditation	Freq.	Pct.
AACSB	103	92.0%
ABET/CAC	1	0.9%
Other	4	3.6%
Subtotal*	N/A	N/A
No Resp.	0	
Total*	112	

Table 5 shows nearly all respondents reported being housed in a college of business, which is what we expected from the sample surveyed.

Table 6 shows that most respondents reported being more than 50 years old, with nearly all the rest over 40. This is consistent with expectations.

Table 7 shows that almost all respondents reported that their college is AACSB-accredited, consistent with expectations.² Only one respondent reported having ABET/CAC accreditation. Of the "other" accreditations, two were international (non-English) and two were unspecified.

The demographics thus show the typical respondent to be a professor over 40 years old who chairs a department containing an IS program, in an AACSB-accredited college of business. Table 8 shows this:

²Nine respondents reported that their college is not AACSB-accredited even though it was listed as such.

Demographic	Mode	Freq.	Pct.
Academic Rank	Professor	67	61.5%
Administrative Level	Department	83	79.0%
Department Name	Management Information Systems	34	31.8%
College Name	Business	107	97.3%
Age	> 50	71	71.8%
Accreditation	AACSB	103	92.0%
Total*		112	

*Responses not cumulative

We note that 48 respondents (42.8%) fit this profile completely. The two weakest modes in Table 8 are for academic rank and department name. While combining associate professor with professor accounts for about 92% of the academic ranks, no such easy solution is available for department names: the spread between the first and second most popular responses is greater than the spread between the succeeding pairs. Clearly, department name shows the least consistency of all the demographics measured.

Familiarity with ABET Standards

We asked how familiar respondents are with the ABET/CAC IS accreditation standards. Their responses are shown in Table 9:

Familiarity	Freq.	Pct.
Quite Familiar	13	11.8%
Familiar	19	17.4%
Not Very Familiar	38	34.5%
Not at all Familiar	39	35.5%
Subtotal	109	100.0%
No Response	3	
Total	112	

Table 9 shows that about 29% of the respondents felt either quite familiar or familiar with the ABET/CAC IS accreditation standards. Of course, this means over $\frac{2}{3}$ were unfamiliar with them. To approximate a description of the type of respondent who reported a degree of familiarity with the standards, we averaged the demographics of only those respondents claiming to be familiar or quite familiar with the ABET/CAC IS standards. Table 10 shows these statistics:

Demographic	Mode	Freq.	Pct.	T10-T8
Rank	Professor	21	65.6%	4.2%
Administrative Level	Department	26	81.3%	1.4%
Department Name	Management Information Systems	7	21.9%	-9.9%
College Name	Business	31	96.9%	-0.4%
Age	> 50	21	65.6%	-6.2%
Accreditation	AACSB	29	90.6%	-1.3%
Total*		32		

*Responses not cumulative

The modes in Table 10 are identical to those of Table 8, but the percentage changes in the modes, as shown in the rightmost column of Table 10, are interesting. Administrative level, college name, and accreditation type have virtually identical proportions in the overall sample and the informed subsample; proportions associated with academic rank, department name, and age changed more substantially. Compared to the overall sample, there is a greater proportion of

full professors in the informed group, yet they are younger. Additionally, the proportion of departments titled MIS fell nearly 10% from the overall sample to the informed subsample.

Interest in Becoming ABET Accredited

We asked how interested respondents were in actually pursuing ABET/CAC accreditation of their IS program. Responses are in Table 11:

Interest	Freq.	Pct.
Not interested	61	57.5%
Thinking about it	25	23.6%
Discussing	13	12.3%
Actively pursuing	4	3.8%
Seriously studying	3	2.8%
Subtotal	106	100.0%
No Response	6	
Total	112	

Table 11 shows that just over half of the respondents reported no interest in pursuing ABET/CAC IS accreditation for their programs. Of course, this raised the question of who the other half were, so we checked the modal demographics of respondents who chose one of the other answers. These statistics are shown in Table 12, again with the rightmost column showing percent differences between the interested subsample and the overall sample:

Demographic	Mode	Freq.	Pct.	T11-T8%
Rank	Professor	24	53.3%	-8.1%
Administrative Level	Department	38	84.4%	4.6%
Department Name	Management Information Systems	9	20.0%	-11.8%
College Name	Business	43	95.6%	-1.7%
Age	>50	25	55.6%	-16.3%
Accreditation	AACSB	41	91.1%	-0.9%
Total*		45		

*Responses not cumulative

The modes of the interested subsample are the same as those of the overall sample, but some proportions changed. Administrative level, college name, and accreditation type varied little; rank, department name, and age varied more. It appears that the interested subsample is of lower academic rank and is younger than the overall sample. Additionally, the proportion of departments titled MIS fell over 10%. (The proportion of CIS Departments climbed about 3%; see Table 4.)

Compliance With ABET/CAC Standards

To get a sense of how program contents compare with ABET/CAC accreditation standards, we asked respondents how much effort would be needed to bring their program into compliance with each main standard (presenting the content standard in its four parts). Table 13 contains the results, with the standards ordered by the number of respondents indicating that their program could comply with little or no effort:

Table 13. Overall Effort Needed to Comply with ABET/CAC Standards

Standard	Effort Needed to Comply									
	Complies Now		Minor Effort		Major Effort		Will Not Comply		NR	Total
	Freq.	Pct.*	Freq.	Pct.*	Freq.	Pct.*	Freq.	Pct.*		
30 Gen. Ed. Semester Credits	94	94.9%	4	4.0%	0	0.0%	1	1.0%	13	112
15 Business Semester Credits	91	90.1%	7	6.9%	0	0.0%	3	3.0%	11	112
Technology Infrastructure	78	76.5%	20	19.6%	4	3.9%	0	0.0%	10	112
Institutional Facilities	76	74.5%	21	20.6%	1	1.0%	4	3.9%	10	112
Faculty	74	72.5%	21	20.6%	5	4.9%	2	2.0%	10	112
Students	75	73.5%	17	16.7%	8	7.8%	2	2.0%	10	112
Inst. Support & Fin. Resources	68	68.0%	18	18.0%	12	12.0%	2	2.0%	12	112
Program Delivery	66	64.7%	21	20.6%	10	9.8%	5	4.9%	10	112
09 Quantitative Semester Credits	56	56.6%	26	26.3%	11	11.1%	6	6.1%	13	112
Objectives & Assessments	46	45.1%	36	35.3%	18	17.6%	2	2.0%	10	112
30 IS Semester Credits	46	46.5%	24	24.2%	12	12.1%	17	17.2%	13	112

*Percent calculations exclude nonresponses

Table 13 shows that, with respect to present compliance, the standards divide naturally into four groups. The first group contains the general education and business credit standards; almost all respondents indicated that their program presently meets these standards. The second group contains the technology infrastructure, institutional facilities, faculty, and students standards; roughly $\frac{3}{4}$ of the respondents indicated that their program presently meets these standards. The third group contains the institutional support & financial resources and program delivery standards; roughly $\frac{2}{3}$ of the respondents indicated that their program presently meets these standards. The fourth group contains the quantitative credit, objectives & assessments, and IS credit standards; roughly half the respondents indicated that their program presently meets these standards. One standard was declared unreachable by more than a handful of respondents: the IS credit standard.

To discover what type of respondent was most compliant with the ABET/CAC IS accreditation standards, we checked the modal demographics of respondents whose programs could meet standards with little or no effort. These results are shown in Table 14:

Table 14. Demographics of Respondents Whose Programs Can Comply with All ABET/CAC Standards with Little or No Effort

Demographic	Mode	Freq.	Pct.	T14-T8%
Rank	Professor	26	55.3%	-6.1%
Administrative Level	Department	37	78.7%	-1.1%
Department Name	Management Information Systems	10	21.3%	-10.5%
College Name	Business	46	97.9%	0.6%
Age	>50	32	68.1%	-3.8%
Accreditation	AACSB	45	95.7%	3.8%
Total*		47		

*Responses not cumulative

As with prior comparisons, the modes of the compliant subsample demographics are the same as those of the overall sample, but the proportions associated with rank, department name, and age are different. The right-most column of Table 14 shows that compliant respondents were of slightly lower rank and age and were much less likely to be from an MIS Department than was the whole sample.

Potential Benefits Of Accreditation

To get a sense of how IS program leaders regard potential benefits of ABET/CAC accreditation of their programs, we asked them about a number of paired benefits and objections voiced while developing the questionnaire. Table 15 contains the benefit-objection pairs ordered by the ratio of benefit choices to objection choices for each:

Potential Benefit or Objection	Benefit		Objection		Don't Know		NR	Total
	Freq.	Pct.*	Freq.	Pct.*	Freq.	Pct.*		
Effect on Value of AACSB Accreditation	Increase		Decrease		70	67.3%	8	112
	26	25.0%	8	7.7%				
Expense	Affordable		Too Expensive		44	41.9%	7	112
	41	39.0%	20	19.0%				
Representation of Program's Technical/Managerial Balance	Accurate		Inaccurate		50	48.5%	9	112
	35	34.0%	18	17.5%				
Effect on IS Program Quality	Desirable		Undesirable		62	60.8%	10	112
	25	24.5%	15	14.7%				
Relations with Other Business Programs	Help		Harm		61	62.2%	14	112
	23	23.5%	14	14.3%				
Representation of Relationship with CS	Accurate		Inaccurate		56	56.0%	12	112
	24	24.0%	20	20.0%				
Overall Program Benefits	Significant		Negligible		46	44.7%	9	112
	21	20.4%	36	35.0%				

*Percent calculations exclude nonresponses

The clearest message from Table 15 is uncertainty: in every case the most preferred answer was "don't know," and in all but two cases, that was the majority response. Also, the number of nonresponses varied from item to item, suggesting a degree of deliberate self-censorship among respondents. Having said that, though, two other interesting points emerge. First, only one potential objection, the lack of overall program benefits, elicited more agreement than its paired benefit, although the concern of looking too much like CS was close. Fourth, by a ratio of more than 3:1 respondents expected that ABET/CAC accreditation would have a positive effect on their AACSB status.

To discover what type of respondent was most optimistic about the benefits of ABET/CAC IS accreditation, we checked the modal demographics of respondents who chose all the benefits. These results are shown in Table 16:

Demographic	Mode	Freq.	Pct.	T16-T8%
Rank	Professor	4	100.0%	38.5%
Administrative Level	Department	4	100.0%	20.2%
Department Name*	BIS (n=1), CIS (n=1), IT (n=1), MIS (n=1)	N/A	N/A	∞
College Name	Business	4	100.0%	2.7%
Age	>50	3	75.0%	3.2%
Accreditation	AACSB	4	100.0%	8.0%
Total**		4		

*BIS = Business Information Systems, CIS = Computer Information Systems, IT = Information Technology, MIS = Management Information Systems

**Responses not cumulative

Table 16 shows that one mode, department name, changed from that of the overall sample. However, the table also shows that only four respondents (3.57% of the sample) were entirely optimistic about the benefits of ABET/CAC accreditation. Given this very small number, we venture no other observations here.

Colleague Support For Accreditation

To estimate how IS program leaders believe their colleagues might regard ABET/CAC accreditation, we asked them whether they would expect support or opposition from a number of types of colleagues. Table 17 contains these results, ordered by the ratio of expected support and opposition:

Table 17. Overall Expected Support of or Opposition to ABET/CAC Accreditation from Colleagues

Type of Colleague	Support		Oppose		Don't Know		NR	Total
	Freq.	Pct.*	Freq.	Pct.*	Freq.	Pct.*		
IS Program Faculty	42	39.6%	10	9.4%	54	50.9%	6	112
IS Program Administrators	40	37.4%	17	15.9%	50	46.7%	5	112
University-Level Administrators	23	22.5%	10	9.8%	69	67.6%	10	112
Non-IS, Non-Business Program Administrators	25	24.0%	12	11.5%	67	64.4%	8	112
College-Level Business School Administrators	36	34.0%	19	17.9%	51	48.1%	6	112
College-Level Non-Business Administrators	20	19.6%	13	12.7%	69	67.6%	10	112
Non-IS Business Program Administrators	26	24.5%	21	19.8%	59	55.7%	6	112
Non-IS Business Faculty	21	20.2%	24	23.1%	59	56.7%	8	112

*Percent calculations exclude nonresponses

Again, the clearest message of Table 17 is uncertainty: in every case the most preferred answer was “don’t know,” and in all but two cases, that was the majority response. Also, as the administrative distance from the colleague grew, uncertainty regarding the colleague’s attitude grew. Having acknowledged this uncertainty, however, we see three groups of colleagues in the varying expectations of support that respondents reported. The least support was expected from non-IS business faculty (the only category to elicit more expectation of opposition than of support), non-IS business program administrators, and college-level non-business administrators. Respondents generated a much more optimistic support-to-opposition ratio (about 2:1) for college-level business school administrators, non-IS non-business program administrators, university-level administrators, and IS program administrators. The highest expectation of support (a support-to-opposition ratio of about 4:1) was reserved for IS program faculty.

To discover what type of respondent was most optimistic about colleague support for ABET/CAC IS accreditation, we checked the modal demographics of respondents who reported an expectation of support from all colleagues. These results are shown in Table 18:

Table 18. Demographics of Respondents Entirely Optimistic About Colleague Support for ABET/CAC Accreditation

Demographic	Mode	Freq.	Pct.	T18-T8%
Rank	Professor	7	70.0%	8.5%
Administrative Level	Department	9	90.0%	10.2%
Department Name	Computer Information Systems	3	30.0%	12.2%*
College Name	Business	10	100.0%	2.7%
Age	>50	9	90.0%	18.2%
Accreditation	AACSB	10	100.0%	8.0%
Total**		10		

*CIS was reported by 19 (17.8%) of the original sample. This figure is used here but was not the overall mode and so does not appear in Table 8.

**Responses not cumulative

Table 18 shows that one mode, the department name, changed to computer information systems from the overall mode of management information systems (only one MIS program leader was in the entirely optimistic group). The table also shows that 10 respondents (8.9% of the sample) were entirely optimistic about colleague support. While this is a small number, it is more than double the number of respondents who were entirely optimistic about benefits of ABET/CAC accreditation.

Summary of IS Program Leader Survey

To summarize, then, 112 of the 400 IS program leaders in AACSB-accredited business schools responded to a web-based questionnaire asking about their familiarity with and interest in the ABET/CAC accreditation standards for IS programs, their program’s present degree of compliance with the standards, their perception of potential benefits of ABET/CAC accreditation, and the degree of support from colleagues they would expect for efforts to obtain ABET/CAC accreditation.

Demographics: The most common respondent was a full professor over 40 years old who chairs some kind of IS department in an AACSB-accredited college of business, but more than half the sample varied from this in one or more respects. Respondents who were more favorably inclined toward ABET/CAC accreditation tended to be younger and associated with a program named something besides MIS.

Familiarity: About 29% of the respondents indicated that they were either “quite familiar” or “familiar” with the standards. The remainder (excepting three nonresponses) reported little or no familiarity with the standards.

Interest. About 41% of the respondents indicated some degree of interest in ABET/CAC accreditation of their IS program. The remainder (excepting six nonresponses) reported no interest.

Present Compliance: Almost all respondents indicated that their programs presently meet the general education and business credit standards. About $\frac{3}{4}$ of the respondents indicated that their programs presently meet the technology infrastructure, institutional facilities, faculty, and students standards; an additional $\frac{1}{5}$ or so of the respondents indicated that their programs could meet these standards with minor effort. About $\frac{1}{2}$ of the respondents indicated that their programs presently meet the institutional support & financial resources and program delivery standards; an additional $\frac{1}{5}$ or so of the respondents indicated that their programs could meet these standards with minor effort. About $\frac{1}{2}$ of the respondents indicated that their programs presently meet the quantitative credit, objectives & assessments, and IS credit standards; an additional $\frac{1}{4}$ or so indicated that their programs could meet these standards with minor effort. The IS credit standard was the most problematic standard.

Potential Benefits. Between $\frac{1}{2}$ and $\frac{2}{3}$ of the respondents reported that they did not know whether their program would reap any of the potential benefits checked in the questionnaire. The result that yielded the least uncertainty was the positive opinion that ABET/CAC accreditation is affordable; the next most certain result was the negative opinion that accreditation would generate negligible overall program benefits. The result that garnered the most agreement was the positive opinion that ABET/CAC accreditation would enhance the value of AACSB accreditation; unfortunately this result also yielded the greatest uncertainty.

Expected Colleague Support: From just under $\frac{1}{2}$ to more than $\frac{2}{3}$ of the respondents reported that they did not know whether various colleagues would support or oppose ABET/CAC accreditation efforts. The most respondents (~40%) expected support from IS faculty. The fewest respondents (~20%) expected support from non-IS business faculty.

Discussion

We offer the following interpretations of the findings, concentrating on the survey (section IV) rather than the comparison (section III) and admitting that the reader may legitimately come to different conclusions than we do. We organize our comments in the following sections: response rate, familiarity, interest, compliance, potential benefits, expected colleague support, and demographics.

Response Rate

We admit to disappointment in the response rate. We hoped that our interest in the topic would be shared by most IS program leaders, but evidently this was not the case.

Familiarity

Overall, the familiarity data were discouraging, indicating as they do that the great majority of IS program leaders in AACSB-accredited business schools know little or nothing about ABET/CAC accreditation. This is unfortunate reinforcement of the lack of interest implied by the low response rate.

However, the data also seem to imply to us a tangible distinction between IS program leaders familiar with the standards and those unfamiliar with them. Several dozen chairs of traditional MIS departments completed the questionnaire, but fewer were familiar with the ABET/CAC standards than were their peers in programs with other names. We believe this may be evidence of relatively greater interest in ABET/CAC accreditation among IS programs that have had to be more innovative by virtue of relatively recent creation (or name change), by cohabitation with other programs in a single administrative unit (e.g., Accounting & Information Systems), or by influence from non-business disciplines (e.g., Computer Information Systems, Information Technology). We also note that the program leaders who were more familiar with ABET/CAC tended to be younger than the overall sample average.

Interest

In contrast to the familiarity data, the questionnaire results indicated clear interest among a large fraction (42.5%) of respondents. In addition, we see demographic patterns in the interest data similar to those we saw in the familiarity data: more leaders of non-MIS IS programs tend to be interested in ABET/CAC accreditation, as do younger program leaders. Thus, despite the finding that over half the respondents indicated no interest at all in pursuing ABET/CAC accreditation of their IS program, we see evidence of the beginnings of a movement toward embracing ABET/CAC as a standard for IS program academic quality.

Compliance

The compliance data were at the same time reassuring and disquieting. On the positive side, most respondents indicated that their programs were either in compliance or could easily be brought into compliance with most of the ABET/CAC standards. The disquieting finding was that less than half (~46%) of the IS programs in the sample contain the required 30

semester credits of information systems content, and a surprising number (17.2%) indicate that they cannot change this. Among respondents indicating any degree of interest in pursuing ABET/CAC accreditation, the number who reported compliance with the IS credit standard rose, but only to about 57%.

As above, we see younger faculty and non-MIS departments associated with more compliant programs. We conjecture that this may be evidence of some older faculty and traditional MIS departments resting on their laurels.

Potential Benefits

Next to the lack of interest expressed by the general sample, possibly the most distressing finding of the study was the large degree of uncertainty about potential benefits of ABET/CAC IS program accreditation. The apparent self-censorship in response to this item indicates to us the highest uncertainty here in the whole questionnaire. This sense of uncertainty was reinforced by the finding that even respondents who believed in one potential benefit often did not believe in the others. We saw no age or department name effect in this finding; that is, younger respondents were no more certain of their opinions here than older respondents, nor was any particular department name associated with higher levels of certainty. We see this as evidence of a great need for IS program leaders to study the pros and cons of program-level accreditation (e.g., accounting, computer science, nursing, education, etc.) in order to establish an opinion of its value.

Colleague Support

The data indicate a great degree of uncertainty in regard to the support or opposition colleagues might offer to ABET/CAC accreditation efforts, although it is less pronounced in this area than in the area of potential benefits. The demographics of the respondents willing to express an opinion run counter to those of other subsamples in that the respondents most optimistic about colleague support for accreditation efforts tended to be older than the sample average. However, they were similar to other subsamples in that non-MIS programs tended to be more optimistic about colleague support. We speculate that this is because older faculty would be more connected with the power centers in their institutions and non-MIS departments may be more connected with their colleagues by means of hybrid administrative units (e.g., Information & Decision Sciences) or influence from other disciplines (e.g., Computer Information Systems). We see this data as evidence of a need for IS program leaders to connect more with their colleagues so as to be better able to estimate their colleagues' attitudes.

Demographics

The overall demographics of the respondents were unremarkable to us, serving mainly to reassure that we indeed obtained the views of the people we intended to poll. However, the several post-hoc subsamples we examined (i.e., informed, interested, compliant, optimistic) indicate to us an emerging group of IS academics for whom ABET/CAC accreditation (or some similar industry-wide quality certification) is valuable. We see this group as younger and more motivated than average, as implied by their being full professors but younger on average than the full professors in the overall sample. We also see them as more independent than average, as implied by the finding that they more often lead Independent IS departments (i.e., programs not mixed with accounting, OR, etc.) and more innovative than average, as implied by the finding that they tend to lead programs not carrying the traditional name of MIS.

Conclusions

Accreditation is a time-honored and effective way to promote an academic program's quality and credibility. The rise of ABET/CAC accreditation standards for IS programs would appear to present an excellent opportunity for IS programs in AACSB-accredited business schools to improve their standing among their peer programs.

A comparison of AACSB and ABET/CAC accreditation standards finds them to be generally quite compatible with one another.

A survey of IS program leaders in AACSB-accredited business schools found familiarity with and interest in ABET/CAC standards to be just emerging. Although compliance with the ABET/CAC standards is evidently relatively high among most programs, an understanding of potential benefits of accreditation is quite low. Also quite low is an understanding of how colleagues might react to accreditation efforts.

We encourage IS program leaders to become more familiar with the important topic of program accreditation. We also encourage IS program leaders to discuss the pros and cons of accreditation with their colleagues to form a better sense of their colleagues' opinions and experiences with accreditation. Finally, we encourage young, motivated, independent, innovative IS program leaders to continue to lead our field in this area as they have in other areas.



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Editor's Note: The following reference list contains hyperlinks to World Wide Web pages. Readers who have the ability to access the Web directly from their word processor or are reading the paper on the Web can gain direct access to these linked references. Readers are warned, however, that

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About the Authors

Thomas S. E. Hilton is a professor in and chair of the Information Systems Department at the University of Wisconsin—Eau Claire. He has been active in the MIS field since 1978 (PhD, 1982) and has authored numerous journal articles, proceedings papers, and conference presentations. Over his career he has focused on curricular and ethics issues in management information systems. Most recently, he has been studying IT strategic planning. Tom is a reviewer for several IS journals and is a member of a number of academic and professional societies.

Bruce Wai Ning Lo is a Professor in the Information Systems Department at the University of Wisconsin—Eau Claire. He is the author of numerous journal articles. Over his career, which spans Australia, Canada, the UK, and the USA, he has focused on software engineering and information systems management. Most recently, he has returned to an earlier interest in MIS education and training. Bruce is a consulting editor of the *Australian Journal of Information Systems* and a member of the Technical Committee on Information Systems of the International Association of Sciences and Technology Development (IASTED).

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