

# Report of the AACSB International

# Impact of Research

Task Force

**DRAFT FOR COMMENTS** 

# An Invitation for Comments

In a spirit of collaboration, inquiry, and debate, the AACSB International Board of Directors is pleased to invite comments on the Impact of Research Task Force report.

In April 2007, the Board accepted the report and commended the Task Force for producing a thoughtful and insightful analysis and bold recommendations that could profoundly change the way research is conducted, incentivized, measured, and communicated. By urging business schools to invest only in research that advances theory, practice, and/or pedagogy, the Task Force affirms the role of quality research as an essential goal for every business school. At the same time, it recognizes that we must strengthen our commitment to aligning scholarship to the particular missions of business schools, which vary widely around the globe. The Task Force also has proposed several recommendations that will encourage business schools, regardless of mission, to produce new and stronger connections between basic scholarship, pedagogy-oriented research, and the practice of management.

However, implementation of these recommendations cannot occur without your support of the report's objectives. We also need your suggestions on how these objectives will be achieved. Whether you represent management, management education, or a broader perspective, your insights, experiences, and ideas will inform the Board of Directors as we finalize the report and develop a future plan of action.

Comments may be provided via e-mail to ResearchTaskForce@aacsb.edu or through AACSB International's online resource center at www.aacsb.edu/research. Whenever possible, we ask that your response reference specific recommendations, and include reasons for your suggestions and comments.

Thank you in advance for your interest, ideas, and support as we pursue this extremely important initiative.

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# The Impact of Research

Scholarly inquiry is an essential process that places collegiate business schools in a unique and important position at the intersection of management theory, education, and practice. It differentiates institutions of higher education from providers of training and other organizations providing management education but relying for content on scholarship generated by others. Although there are other sources of information and knowledge for practicing managers, not many institutions can claim the level of independence, multi-disciplinary engagement, and quality assurance afforded by collegiate environments. Unquestionably, business schools and their faculties play a crucial role in business and society by creating value through high-quality scholarship and research.

Accordingly, the main purpose of this report is to study and build on the unique and important role of research in business schools. Through this effort, we analyze the nature and purposes of business school research and recommend ways to increase its overall value and visibility.

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We launch our exploration of research in the next section with an historical perspective to show just how essential research has become in business schools. Today, it is hard to believe that one of the main criticisms of the business schools in the 1950s and 60s was that there was no significant research attached to management education programs. In fact, these criticisms led to enormous changes in the way business schools are organized and accredited. From mission statements, to funding, to how we reward faculty—the importance of research now is reflected in nearly everything we do.

### **Historical Perspective**

Acknowledgement of the importance of scholarship and research in business schools has grown over the past 50 years. Business school faculty members have earned a significantly higher level of respect among academic colleagues across the campus since 1959, when Gordon and Howell compared the intellectual atmosphere in the business schools "unfavorably with that in other schools and colleges on the same campus." During the same period Pierson, judging from the comments of university leaders, found that "faculty members in other fields, business executives..., business faculty members, and even the deans themselves," commonly complained that "business schools [had] seriously underrated the importance of research."

<sup>&</sup>lt;sup>1</sup> Gordon and Howell, 1959, p 356

<sup>&</sup>lt;sup>2</sup> Pierson, 1959, p. 311

Placing this in an economic context, achieving academic legitimacy for scholarly inquiry in business schools has been and continues to be an expensive proposition. During the 1960s, the Ford Foundation committed \$35 million (worth more than \$250 million today) to help schools transition away from a focus on anecdotal data and descriptive analysis to more systematic, social science based approaches. True, only a minority of top schools could claim differentiation through an emphasis on research in the 1960-1970 time frame, but by 1988, 26% of American deans reported emphasizing research at least as much as teaching.<sup>3</sup> In 2005, the percentage had risen to 43.3%, and U.S.-based AACSB-accredited business schools reported spending a total of \$320 million annually to support faculty research.<sup>4</sup>

### **Role of Doctoral Faculty and Education**

Directly related to these economic costs is the growth of doctoral faculty and their role in research. Fifty years ago, only 40% of full-time U.S. business school faculty held earned doctorates, and there were only 24 active doctoral programs producing about 100 new business doctorates each year. Today, more than 80% of full-time faculty members in business schools hold earned doctorates and there are more than 200 doctoral programs among AACSB member schools worldwide. These doctoral programs produce the next generations of faculty, and they can be seen as a strong commitment to scholarship—part of the critical underlying base that sustains theory, pedagogy, and practice development. As active and influential participants in the process of scholarly research, doctoral students support business faculty in "this essential and irreplaceable function". This commitment happens at a considerable cost. Most doctoral programs in business schools lose money for the institution, particularly as the emphasis has shifted from teaching with teaching assistants to involving graduate assistants in research.

According to AACSB estimates, the annual cost of educating 10,000 enrolled doctoral students exceeds \$500 million. Nonetheless, growth in doctoral education has not kept pace with the overall growth in management education. In 1995, for example, there were 250 undergraduate and masters graduates for every doctoral degree awarded in the U.S. By 2004, the ratio increased to 350.

Some business school deans lament that they will have to replace up to 25-30% of their faculty during the 2007-2011 period. In 2002, AACSB projected that American business schools will have a gap of nearly 2,500 doctoral faculty by 2012.8 This projection focuses primarily on needs for teaching purposes, but shortages will affect both instructional and scholarly contribution needs of business schools. And shortages are already being reflected in much higher costs for securing the services of academically qualified faculty.

It also is important to note that "replacing" faculty has costs beyond simply the higher salaries caused by market pressures. Soon to be retiring faculty members often accept higher teaching loads as part of their commitment to the institution or as a reflection of lower research

<sup>&</sup>lt;sup>3</sup> Porter and McKibbon, 1988, p. 153

<sup>&</sup>lt;sup>4</sup> Data Provided by AACSB International Knowledge Services

<sup>&</sup>lt;sup>5</sup> Gordon and Howell, 1959

<sup>&</sup>lt;sup>6</sup> Data Provided by AACSB International Knowledge Services

<sup>&</sup>lt;sup>8</sup> AACSB International, 2003

output. Market pressures force schools to offer lower teaching loads to new doctoral graduates, as does a concern for protecting newly-recruited junior faculty trying to establish their research programs. In effect, the desire to nurture and sustain the research activities of junior faculty creates incremental costs that result from both market pressures on direct compensation and the need to hire additional faculty to cover unfilled sections created by lower teaching loads.

### **Journal Publishing and Faculty Associations**

To put this need in further perspective, Cabell's Directories, based primarily in North America and the United Kingdom, list nearly 1,900 English-language journals across the accounting, economics, finance, management, and marketing areas. Based on conservative estimates by AACSB, more than 15,000 English language business and management articles are published each year. It is not unreasonable to assume that the annual total rises to well above 20,000 when the rest of the world is considered.

Among AACSB-accredited business schools, there are roughly 25,000 academically qualified faculty members who, for the most part, produce these articles. Many of these academics come together each year in large, discipline association meetings to share and assess research findings, connect with colleagues, and recruit new faculty members. More than 6,700 management researchers from 73 countries gathered for the 2006 Annual Meeting of the Academy of Management in Atlanta. Nearly 9,000 registered for the Allied Social Science conference and almost 2,700 attended the 2006 Annual Meeting of the American Accounting Association. More than 3,000 scholarly papers will be presented at the annual meeting of The Institute for Operations Research and the Management Sciences (INFORMS) in 2007. Similar events are held all over the world. These organizations, in addition to AACSB, must deal with the issues related to research and generational transition in faculty affecting most business schools.

### The Need for Further Inquiry

The rapid change in the size and stature of research in business schools has engendered passionate dialogue and debate.

The rapid change in the size and stature of research in business schools has engendered passionate dialogue and debate. For example, business schools have recently been criticized for placing too much emphasis on research relative to teaching, and for producing research that is too narrow, irrelevant, and impractical. Despite this rise in importance, AACSB has not studied

the dynamics of scholarly inquiry in business schools since issuing its *Final Report of the AACSB Task Force on Research* in 1987. The report offered several compelling rationales justifying the importance of faculty scholarship, defined and delineated five types of relevant research, and presented recommendations to advance research in business schools. It also clearly recognized the need for a focus on research if business schools were to gain credibility in an academic

world where scholarly inquiry provides the core basis for assessment of quality of thought and academic programming. This is reflected in university policies governing compensation and tenure, and, in most cases, can be seen in resource allocations to colleges and schools within a given university.

Although the 1987 report was important and influential, much has changed since its publication. Today, more than double the number of business schools are accredited by AACSB, and their missions are now highly diverse. While twenty years ago nearly all AACSB members were based in the U.S., in 2007 more than one-third of AACSB's member institutions are located among 70 other countries. Accreditation standards, already drastically revised in 1991, changed again in 2003, further correlating research with institutional missions.

Since the publication of the 1987 report, media rankings of MBA programs have grown dramatically in number and importance. The publication of L.W. Porter and L.E. McKibbon's influential book, *Management Education and Development: Drift or Thrust into the 21st Century?* in 1988, and then Ernest Boyer's 1990 *Scholarship Reconsidered*, informed the development of management education and research. Today, the widespread use of the Internet and other technologies have changed the way education is delivered, enabled new kinds of research, and dramatically altered the way we communicate with different constituencies.

### A New Research Imperative

In 2006, the Impact of Research Task Force was asked to reexamine scholarship and research in business schools and began to explore the reasons why scholarly inquiry matters deeply to students, faculty, schools, practicing managers and their organizations, and society. In this context, it is clear that AACSB

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must continue to play a leadership role. However, it is important to note that the task force does not take a position in the ongoing debate about "relevance vs. rigor." Both are important and should be encouraged in ways consistent with the institutional missions of individual business schools. Instead, we focus on clarifying what is meant by scholarship and research, and we explore strengths and weaknesses in the value proposition for business school research. We also offer recommendations to increase the overall value and visibility of business school research in light of institutional missions.

# Scholarly Inquiry and Intellectual Contributions

ometimes in business schools and universities the word "research" is inappropriately used to refer exclusively to publications in refereed discipline-based academic journals. In this report, the term "research" is used more broadly to describe forms of scholarly inquiry that lead to intellectual contributions of various types. Similarly, the term "scholarship" is interpreted even more broadly to encompass scholarly inquiry and its outcomes regardless of form. That scholarship is thought to be more inclusive than research is confirmed by studies across disciplines as diverse as history, chemistry, sociology, and the arts. 9

In the course of discussing and evaluating the many dynamics involved in scholarly inquiry and intellectual contributions, it became evident that more attention needs to be paid to defining what is meant by "research". Much of the current debate is driven by the often cavalier and confusing applications of the term and its related concepts. As a result, we developed working definitions as a foundation for this report and later discussions.

### The Process and the Product

Scholarly inquiry in business schools may be described as a set of activities designed to systematically seek answers to questions of theoretical or practical importance to organizations, particularly those that focus on economic value creation. This includes examinations of behavior in organizational contexts, as well as the social and economic settings within which such organizations are embedded. Scholarly inquiry emphasizes the process of inquiry, which in academic settings means applying discipline-specific knowledge and systematic, rigorous methods of analysis. To engage in scholarly inquiry, faculty must maintain both disciplinary currency (one must know what is "already known") and relevance (one must be able to identify issues of "significant interest").

Scholarly inquiry at times, hopefully often, will result in intellectual contributions. These shared, tangible products are subject to assessment by others and serve to advance the understanding of business and management processes. Not all scholarly inquiry will result in explicit "intellectual contributions" because not all results are seen as "additive"— i.e., it is often not possible to publish negative or duplicative results—or the outcomes are so restricted in access or focus that there is limited exposure, e.g., proprietary consulting reports. In effect, one can be engaged in scholarly inquiry without generating intellectual contributions that serve to provide a foundation for further inquiry or a greater general understanding of business or managerial processes.

### Scholarships of Discovery, Application, and Teaching

Of course, intellectual contributions can be made in many forms, ranging from articles in academic journals to presentations at trade association meetings. Intellectual contributions also

may be classified according to purpose. For example, in AACSB accreditation standards, discipline-based scholarship, sometimes called basic research or the scholarship of discovery, is defined as contributing to the stock of knowledge of business and management theory. Discipline-based scholarship often is reviewed by peers prior to publication and frequently appears in the form of academic journal articles or other scholarly publications. It is intended mostly for other academics who also are seeking to advance knowledge of theory. The immediate impact of the "product" on practice may be of little concern. We also should note that the use of the term "discipline-based" is not intended to exclude inter-disciplinary or cross-disciplinary efforts.

Contributions to practice, sometimes called applied research or the scholarship of application, apply knowledge directly to important problems in business and management. To be considered scholarship, these contributions must go beyond observation and description, and beyond what might be considered service to business organizations. These intellectual contributions are based on knowledge of theory and the application of rigorous approaches to inquiry.

Learning and pedagogical research, sometimes called instructional development or the scholarship of teaching, transform and extend discipline expertise to enhance learning, knowledge acquisition, problem solving, and skill development. These contributions are distinguished from discipline-based research and contributions to practice not necessarily in their absence of rigor, but in their primary purposes.

### **Forms of Output**

Intellectual contributions across all categories must be the result of systematic scholarly inquiry and be available for assessment by others. However, the purpose of an intellectual contribution does not necessarily imply a particular form of output. For example, refereed journal articles might include

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empirical research, theoretical models, and interdisciplinary efforts. Some refereed journals publish articles that can be directly applied to practice or cases to support learning. Furthermore, the categories are not intended to express strict boundaries, which place any contribution or scholar neatly into one bucket. It is more appropriate to view intellectual contributions and the work of any scholar along a set of continua that span the categories. Table 1 lists several forms of intellectual contributions by category to provide some context to this.

Interestingly, today more business schools claim to emphasize contributions to practice rather than discipline-based scholarship. In a 2005 AACSB survey, 63.7% of deans claimed their schools emphasized contributions to practice at least as much as discipline-based scholarship, compared to 54% who claimed their institutions emphasized discipline-based scholarship at

least as much as contributions to practice. Only 6.3% reported emphasizing learning and pedagogical research more than both discipline-based scholarship and contributions to practice, while 36.5% emphasized learning and pedagogical research more than discipline-based scholarship.<sup>10</sup>

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Table 1. Forms and Categories of Intellectual Contributions

Discipline-based Scholarship	Contributions to Practice	Learning and Pedagogical Research
Articles in peer-reviewed discipline-based journals	Articles in professional or trade journals or magazines	Articles or cases with instructional materials in refereed learning-oriented journals
Research monographs	Publicly available technical reports for organizational projects	Teaching manuals
Scholarly books	Professional or trade books	Textbooks
Chapters in scholarly books	Chapters in professional or trade books	Chapters in textbooks or other learning-oriented materials
Articles published in proceedings of scholarly meetings	Significant contributions to trade journals or magazines authored by others	Instructional software
Papers presented at scholarly meetings	Significant presentations at trade meetings	Materials describing the design and implementation of curricula or courses
Papers presented at research seminars	Reviews of professional or trade books	Papers presented at learning- oriented meetings
Reviews of scholarly books	Reviews of popular books	Reviews of learning-oriented books

Note: This list is not intended to be exhaustive and the categories are not intended to express strict boundaries.

## Exploring the Value Proposition for Business School Research

The value proposition for business school-based research rests on three important foundations: independence, rigor, and cross-fertilization. Collegiate business schools build and maintain an environment designed to support the pursuit of original ideas about business processes and organizations through scholarly inquiry. Through strict peer review, the academy seeks to protect the rigor of faculty research output. Furthermore, scholarly inquiry in business schools is enriched by collaboration among faculty representing a broad range of functional expertise within business and across a broad set of other areas ranging from mathematics to performing arts, political science to physics, and history to medicine. As Pfeffer and Fong admit in an article often critical of business schools:

The research capabilities, and particularly the rigorous thinking and theoretical grounding that characterizes business school scholars and their research, actually offer an advantage over the casual empiricism and hyping of the latest fad that characterizes much, although not all, of the research that comes out of non-academic sources. And business school faculty have spent years honing the craft of preparing and delivering educational material in ways that are at once accessible and intellectually sound.<sup>11</sup>

Despite the fact that these are defining characteristics of business schools, there is also the reality that business schools are "professional schools" and not traditional discipline departments such as economics, psychology or sociology. That is, business schools have an obligation to maintain contact with and contribute to both underlying core disciplines and practice. A business school cannot separate itself from practice to focus only on theory and still serve its function. On the other hand, it cannot be so focused on practice that it fails to support development insights into principles and theories that serve to increase understanding of practice. Indeed the potential to have impact, i.e., to change the way people and institutions behave, on

both practice and theory sets business schools apart from competing institutions. Having said this, it is critical to explore the research value proposition to various stakeholders in greater depth.

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### Value to Students

Scholarly inquiry is presumed to benefit students of business and management through higher quality curricula, courses, and teaching. A multi-disciplined faculty contributes considerable knowledge and expertise to the collaborative process of creating, monitoring, evaluating,

and revising curricula. Each faculty member, bringing to bear analytic skills and logic framed by an understanding of inquiry, also decides on course-level learning goals, combines content with pedagogy to create courses, and evaluates individual learning. Finally, faculty members interact with students within the courses they deliver, conveying both facts and values. The opportunity for students to interact with faculty who think with the critical frameworks inherent in scholarship is one of the most important defining characteristics of higher education. In a sense, the values and perspectives provided by scholarly inquiry provide a basis for differentiating education from training and learning from story-telling. Indeed, one of the more interesting reflections of this is the clear desire of students in "honors" programs to become actively involved in their own and faculty research. Honors students are traditionally the best students in a business school and their rather consistent desire for and actual involvement in research suggests a specific link between scholarship and learning outcomes. This is consistent with Demski and Zimmerman's<sup>12</sup> point that knowledge of the research process creates a disciplined way of thinking that is of value regardless of the types of problems and issues that managers will face.

Before continuing it is important to note that, with the possible exception of accounting, the way research interacts with education in business schools differs in one very important way from other professional schools, such as medicine, law, and engineering. In these areas, licensure and accreditation criteria tend to be more prescriptive—offering specific, collectively-defined guidance for the curriculum supporting a particular degree, such as M.D., J.D., etc. In business education, schools typically have a greater variety of programs with different anticipated outcomes—undergraduate, certificates, general masters, specialized masters, etc. Even programs of the same title (e.g., MBA) represent a broad range of learning goals within and between schools. Greater diversity and the relative absence of prescriptive requirements means that the types of scholarship serving to inform the instruction found at any given school are likely to show considerable variance.

### **Research and Teaching Effectiveness**

Discipline-based scholarship, which deepens our understanding of fundamental issues in business and management, eventually finds its way into business curricula and courses, most often by design as it provides a basis for institutional differentiation. Of course, personal contributions to practice help professors bring concepts closer to the day-to-day lives of working professionals, breathe life into concepts, and facilitate debate about the efficacy of different approaches to problems and issues. Effective education also relies heavily on learning and pedagogical research. Cases, simulations, textbooks, and the like provide essential learning objects and tools to support education, and the design of such products is increasingly complex and demanding of innovation based on levels of increasingly sophisticated scholarly inquiry. This is not to say that the development of curricula and courses is informed only by the intellectual contributions of faculty. In fact, AACSB accreditation standards require schools to engage the business communities they serve in the process of developing learning goals and

curricula. It is also important to note that instruction, especially when it involves working professionals and executives, creates an interactive process that contributes to scholarship.

This framework assumes that instruction and research are interdependent and mutually beneficial. For example, Becker, Lindsay, and Grizzle found that students are attracted to schools by faculty research. Their results also demonstrated that an increase in research activity "makes a school relatively more attractive to better students yielding a more qualified, as well as a larger, pool of applicants." Smaller studies also offer evidence of positive student perceptions about research.

Conventional wisdom holds that research excellence and effective teaching are positively related either because knowledge drawn from research contributes to success in teaching or because the characteristics of good researchers also turn out to be the characteristics of effective teachers. But this is not universally accepted. There are those who argue that

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research and teaching are negatively related, either because they compete for the scarce time and energy of faculty, require distinctly different personalities, or are motivated by conflicting reward systems. Others posit that no relationship exists between research and teaching. There appears to be no definitive research on this issue, although AACSB clearly believes that interdependency exists and is a positive aspect of effective business education.

Most previous efforts to study the relationship between research and teaching effectiveness have been criticized for using limited measures of "research productivity" (e.g., refereed academic journal articles) and "teaching effectiveness" (e.g., student evaluations of teaching). Such studies also can be challenged because they explore relationships between research productivity and teaching effectiveness at the individual level. AACSB accreditation standards are built on the philosophy that faculty must be engaged in scholarly inquiry, regardless of whether or not intellectual contributions are produced as a result. But the standards do not require all faculty members to produce intellectual contributions, including refereed academic journal articles, or even that discipline-based research must constitute the majority of these contributions. The standards do require that a substantial cross-section of faculty in each discipline at a given school produce intellectual contributions. One implication is that it is possible to achieve high-quality education when curricula design, course development, and instructional processes are integrated across faculty to allow specialization according to strengths. That is, the same people are not required to perform each task in each process. For example, the most research-active discipline scholars might collaborate to design curricula and define course objectives and content; course development specialists might design supporting exercises; and qualified but less research-active scholars might deliver the majority of instruction. Thus

<sup>13</sup> Becker et al, 2003, p. 564

<sup>14</sup> For example, Neumman, 1994; Jenkins et al, 1998

program and college-wide levels of analysis are needed to truly assess the connection between research and teaching implicit in AACSB accreditation policies.

Pfeffer and Fong argue that narrowing research agendas generated by discipline-based parochialism have been to blame for failures to develop truly integrated curricula.

Of course, it is possible that research has had negative consequences on the quality of education through exactly the channels described above. For example, Pfeffer and Fong<sup>15</sup> argue that narrowing research agendas generated by discipline-based

parochialism have been to blame for failures to develop truly integrative curricula. Ghoshal<sup>16</sup> goes further by suggesting that "academic research related to the conduct of business and management has had some very significant and negative influences on the practice of management. This influence has been less at the level of adoption of a particular theory and more at the incorporation, with the worldview of managers, of a set of ideas and assumptions that have come to dominate much of management research." More specifically, he suggests that "by propagating ideologically inspired amoral theories, business schools have actively freed their students from any sense of moral responsibility."<sup>17</sup> Interestingly, embedded in these criticisms about the nature of research is the assumption that research does in fact impact teaching. These criticisms, in fact, cry out for more research to enrich our understanding about behavior and organizations.

### **Value to Practicing Managers**

As discussed above, research of all types presumably indirectly impacts practice through both degree and non-degree education. While it is true that business schools also seek to advance practice more directly, there is little doubt that, over time, the scholarship of business school faculty has become more theoretical and scientific. For some educators and managers alike, this evolution is viewed as natural and necessary. Indeed, several prominent researchers and executives take the view that the most valuable contributions of business schools to practice have come through the advancement of basic knowledge rather than the pursuit of immediate relevance. They would argue that "immediacy of solutions" comes through consulting rather than published theoretical or empirical articles.

There are many examples illustrating that advances in basic research have had a substantial impact on practice. Exemplars of this phenomenon can be seen in finance through academic publications on the theories of portfolio selection,<sup>20</sup> irrelevance of capital structure,<sup>21</sup> capital asset pricing,<sup>22</sup> efficient markets,<sup>23</sup> option pricing,<sup>24</sup> and agency theory.<sup>25</sup> All are well-known for their substantial impact on both theory and practice. In accounting, while building on efficient market theory, the foundational research of William Beaver<sup>26</sup> demonstrated that the stock market reacts strongly to corporate earnings announcements. Applying agency theory, the

<sup>&</sup>lt;sup>15</sup> Pfeffer and Fong, 2002

<sup>&</sup>lt;sup>16</sup> Ghoshal, 2005

<sup>17</sup> Ghoshal, 2005, p. 76

<sup>18</sup> For example, March, 2000

<sup>&</sup>lt;sup>19</sup> For example, John Reed

in interview with Augier, 2006

<sup>&</sup>lt;sup>20</sup> Markowitz, 1952

<sup>&</sup>lt;sup>21</sup> Modigliani and Miller, 1958

<sup>&</sup>lt;sup>22</sup> Sharpe, 1964

<sup>&</sup>lt;sup>24</sup> For example, Black and Scholes, 1973

<sup>&</sup>lt;sup>25</sup> For example, Jensen and Meckling, 1976

<sup>&</sup>lt;sup>26</sup> William Beaver, 1968

work of Watts and Zimmerman<sup>27</sup> has been influential in creating a research stream that addresses how managers choose among accounting methods. In marketing, Keller<sup>28</sup> is well-known for his contributions to understanding the construction, measurement, and management of brands. Green and Rao<sup>29</sup> are credited with developing conjoint analysis approaches to consumer research based on seminal work by Luce and Tukey<sup>30</sup> in mathematical psychology. Today, conjoint analysis is widely used to test new product designs and assess the appeal of advertisements. In information systems, the research of Malhotra<sup>31</sup> has helped companies to understand why knowledge management systems fail and Bass's Diffusion Model has had practical applications for forecasting demand of new technologies.<sup>32</sup> In management, Hofstede<sup>33</sup> has conducted the most comprehensive study of how values in the workplace are influenced by culture and Vroom<sup>34</sup> made seminal contributions to understanding employee motivation. The point here is that while each of these business faculty members pursued schol-

arship that focused on very basic issues and published in academic journals, the product of that scholarship also has had considerable impact on actual practice.

Research cannot be innovative if it is focused on current business problems and true academics should not concern themselves with relevance.

Empirical evidence supports the assertion that academics create the most value by

focusing on developing basic research. For example, Baldridge, Floyd, and Markoczy<sup>35</sup> found a low, but positive relationship between the academic quality (number of citations) and practical relevance (judged by a panel of executives, consultants, and human resources professionals) in a sample of 120 articles published in top academic management journals. This suggests that articles with high "academic value," thereby contributing to incremental gains in knowledge of theory, might have great potential for eventual relevance. Some writers<sup>36</sup> have gone further to argue that research cannot be innovative if it is focused on current business problems and that true academics should not concern themselves with the question of relevance as it is not to their comparative advantage.

Faculty are depicted as theorists who are increasingly detached from the everyday problems of managers.

If we are to believe that basic research is exactly what creates the most value to practicing managers, then we must give some attention to how this research is transferred. One need only browse through a

sample of top academic journals to see that most (if not all) of the articles are in a form <u>not</u> readily accessible to practicing managers. Even if translated, there is the question of how this knowledge can be put into practical application when contextual differences, communication gaps, and misinterpretations are likely.

Of course, not everyone sees the current mix of business school intellectual contributions as satisfactory in serving the needs of practicing managers. Business schools are seen by some

<sup>&</sup>lt;sup>27</sup> Watts and Zimmerman, 1978

<sup>&</sup>lt;sup>28</sup> For example, Keller, 1993

<sup>&</sup>lt;sup>29</sup> Green and Rao, 1971

<sup>30</sup> Luce and Tukey, 1971

<sup>31</sup> Malhotra, 2004

<sup>32</sup> Bass, 1969

<sup>33</sup> Hofstede, for example,1983

<sup>34</sup> Vroom, 1964

<sup>35</sup> Baldridge, Floyd, and Markoczy, 2004

<sup>&</sup>lt;sup>36</sup> For example, March, 2000

as giving greater priority to theory over applied research<sup>37</sup> and producing findings that are not sufficiently useful to be implemented by practitioners.<sup>38</sup> From this perspective, faculty are depicted as theorists who are increasingly detached from the everyday problems of managers. As a result, reformers call for business schools to focus more on the problems experienced by practitioners.<sup>39</sup> Much of this literature focuses on a perceived tradeoff between academic rigor and practical relevance, rather than the opportunity to achieve greater relevance without sacrificing rigor.

Clearly there are differences in expectations placed on business school scholarship by academics and practitioners. Each group has its own distinct standards, priorities, and guiding principles. Academia is predicated on the pursuit of scholarly interests free from alignment with a prescribed ideological or commercial agenda, while practitioners are concerned more with immediate managerial effectiveness and shareholder value, as well as individual commercial agendas. In practice, this means that academics tend to be involved in systematic inquiry based largely on well structured objective approaches with long time frames, whereas the work of managers may be said to be less structured, and is usually enacted under highly-constrained time pressures. While it would be easy to assume that this could cause an insurmountable barrier, it also is possible to view the differences as providing potential complements in the creation of knowledge.

Some critics have argued that business research has become less relevant to practice largely because of the growth in importance of academic disciplines.<sup>41</sup> Theories and methodologies developed in such disciplines as economics, mathematics, sociology, and psychology often are seen as emphasizing theoretical and methodological sophistication at the expense of practical application.<sup>42</sup> The discipline focus of business school research has been reinforced by the publication policies of academic journals. Leading peer review journals often give priority to articles that display theoretical and methodological sophistication over application and relevance.<sup>43</sup> This bias is exacerbated by the predilections of journal editors who may feel a stronger affiliation to their academic discipline than to a functional area within a business school.<sup>44</sup> This can result in articles published in one of the discipline-based journals receiving more academic recognition and "claimed legitimacy" than an article in a business school journal. To critics, this can inhibit innovation and discourage faculty from starting projects of an applied nature as they have less chance of being published in leading journals.<sup>45</sup>

A related theme is the highly-contested debate within the business school academic community about what constitutes high-quality research. <sup>46</sup> This debate centers on which research paradigm is most appropriate for the effective study of business problems. The controversy often coalesces around a discussion over whether a scientific approach that attempts to discover patterns and laws has been an effective way of researching business problems, or whether one of the approaches within the social constructivist paradigm is more effective. In the case of both scientific and constructivist approaches, the demand for more sophisticated theory and methodology often has resulted in such high levels of abstraction that, in many

<sup>&</sup>lt;sup>37</sup> Rynes et al, 2001

<sup>38</sup> Gibbons et al, 1994

<sup>44</sup> Knights & Willmott, 1997

<sup>45</sup> Bedeian, 2004

<sup>46</sup> Whitley, 1984; Ghosal, 2005

cases, the result is seen as detaching theory and methodology from utility in terms of effective business practice.

Closely related to the problem of the content of articles published in journals is the incentive system that determines career progression. Several critics suggest that an unhealthy division in business school research has grown as a result of the typical faculty reward system. <sup>47</sup> Publishing theoretically and methodologically sophisticated research in a leading journal often "counts for more" than an applied article amongst tenure review committees and for annual compensation purposes. Hence faculty members have less incentive to address practice more directly in their research.

As described by Van de Ven and Johnson, there is "growing recognition that the gap between theory and practice may be a knowledge production problem." <sup>48</sup> Proponents of this view have questioned the efficacy of traditional research methods in areas where application is important, such as business and management. They argue for the production of more practice-based knowledge and propose structural reforms or deeper forms of engagement between academics and practitioners to generate knowledge that is both rigorous and relevant. Again, these critics see a clear connection between scholarship and practice with value-added components for both, even as they disagree as to the efficacy of different approaches.

It also is of interest to note developments in business schools outside the United States. In European business schools, where faculty scholarship was not a major factor in the past given their institutional alignment with particular industries, faculty research on management issues now is seen as a necessity and major source of institutional differentiation. In part, this is a

result of increased hiring of doctoral qualified faculty who have been trained in U.S. universities, where faculty research is assumed to be critical. But according to a number of European deans, this phenomenon also is grounded in the reality that corporations find value in such faculty output and, as a result, send executives to programs highlighting high-impact scholarship.

Although there are different opinions about the importance and causes of the research-practice gap, it is clear that any effort to increase the value of business school research should address the challenges of knowledge production and knowledge transfer.

In summary, it can be stated that scholarship by business faculty in its varied forms has had an impact on practice. However, as Shapiro, et al. concluded based on an Academy of Management survey, there is a "general pattern of concern about the management researchmanagement practice gap among academics, business people, and consultants." Furthermore, the gap is seen as resulting from two types of translation problems, which they label "lost before translation" and "lost in translation," reflecting respectively the knowledge production and knowledge transfer issues described above. Although there are different opinions about the

<sup>47</sup> Seybolt, 1996; Dye, 2001; Hopwood, 2002

<sup>&</sup>lt;sup>48</sup> Van de Ven and Johnson, 2006, p. 808

<sup>49</sup> Shapiro et al, 2007, p. 261

importance and causes of the research-practice gap, it is clear that any effort to increase the value of business school research should address the challenges of knowledge production and knowledge transfer.

### Value to Society

Effective scholarship implicitly improves the knowledge base of organizations and society. But what does this mean for scholarship within the context of business schools and universities? In terms of general academic research there is a belief that, if scholarship were left solely to non-educational institutions, market economies would produce too little independent and truly innovative research. Similar outcomes would be expected if business and management research were relegated to non-academic organizations, presumably because it would be less independent, often proprietary, e.g. advances would not be shared, and generally not subject to public scrutiny.

Clearly organizations can be made more effective by accessing scholarship on managerial processes and such effectiveness contributes to national and international economic and societal success. The argument is that business school scholarship contributes to organizational performance by improving underlying managerial practices, as well as by elevating teaching content and the skills of managers. Stronger organizational performance contributes to economic growth, which raises living standards.

There is some empirical evidence to support these connections. For example, using data from 731 medium sized firms in Europe and the United States, Bloom et al. found that better management practices are indeed strongly correlated with better firm performance in terms of productivity, profitability, return, and sales growth. Bertrand and Schoar studied 600 firms and 500 managers involved with at least two different firms. Among their results is a "positive relationship between MBA graduation and corporate performance" as measured by rates of return on assets and operating returns on assets. Benjamin Friedman argues persuasively in his Moral Consequences of Economic Growth that economic growth is essential to "greater opportunity, tolerance of diversity, social mobility, commitment to fairness, and dedication to democracy."

The connection between business research, organizational performance, and societal benefit has been neither fully explored nor clearly articulated – and as a result may not be fully appreciated.

Unfortunately, the connection between business research, organizational performance, and societal benefit has been neither fully explored nor clearly articulated – and as a result may not be fully appreciated. For example, when the U.S. National Academies were

asked to recommend "how the U.S. can compete, prosper, and be secure in the global community of the 21st Century," their 512-page (prepublication) report, entitled *Rising Above The* 

<sup>&</sup>lt;sup>50</sup> Bloom et al, 2005

<sup>&</sup>lt;sup>51</sup> Bertrand and Schoar, 2003, p. 1204

Gathering Storm: Energizing and Employing America for a Brighter Economic Future, gave no attention to the need to invest in business and management research, or in business education for that matter. The Task Force contends that by focusing on the supply of innovation, which is a function of research in basic sciences, the report misses a critical factor in the innovation equation. The financing and demand for innovation is substantially driven by business. This point was raised in recent reports in Canada and the United Kingdom. The Institute for Competitiveness and Prosperity argues that businesses and governments in Canada must rebalance their priorities toward increasing the demand for innovation. They show that Canada produces more science and engineering degrees per thousand population than the United States, but produces 41 percent fewer degrees in business. In response to a report of its Council for Excellence and Management in Leadership, the United Kingdom government stated that "By tackling our management and leadership deficit with real vigour, we will unlock the doors to increased productivity, maximize the benefits of innovation, gain advantage from technological change, and create the conditions for a radical transformation of public services." 53

Scholarship by business school faculty also can and should inform policy. Clearly this has been the case in accounting research. Research by accounting faculty is sometimes utilized by the Financial Accounting Standards Board in its efforts to establish and improve standards of financial accounting and reporting. The back-dating of options by top executives is the latest scandal in corporate environments and was uncovered largely due to research by two business faculty members.<sup>54</sup> In a related example, in 2006 the California Management Review published a position paper signed by 30 leading experts, including dozens of academics, calling for the SEC to repeal the FASB standard requiring the expensing of stock options. Beyond accounting, Michael Porter, who is widely known for introducing the "five forces" framework to analyze competition, also studies and consults on the economic competitiveness of nations, regions, and cities, as well as solutions to social problems. Similarly, Paul Romer has become influential in policy circles for theories that shed light on how government policy impacts innovation.<sup>55</sup> In addition to showing how management research can contribute to several policy areas, such as unemployment, corporate governance, internationalization and trade, and managing public organizations, Hitt suggests that management scholars should include "policy makers and leaders of public organizations as important constituents of management research."56

The reality is that scholarship undertaken by business school faculty has implications for understanding societal dynamics, as well as firm-specific processes. What appears to be missing is a mechanism for connecting the dots between research on managerial or corporate processes and processes affecting organizational competitiveness and societal well being.

<sup>52</sup> The Institute for Competitiveness and Prosperity, 2006, p. 46

 $<sup>^{\</sup>rm 53}$  Council for Excellence and Management in Leadership, p. 1

<sup>&</sup>lt;sup>54</sup>Yermack, 1998; Lie, 2005

# Incentives for Intellectual Contributions

It would be a mistake to believe that business schools and their faculties produce intellectual contributions simply to benefit students, practicing managers, and society. There also must be value created by such activity for business schools and individual faculty members. To understand why intellectual contributions are generated, we must explore the current systems that motivate and encourage scholarship and research in business schools at the business school level (reputation, resource acquisition, and AACSB accreditation) and at the individual faculty level (evaluation systems, promotion and tenure institutions, and academic job markets).

### **Business School Incentives**

Business schools have been motivated to achieve greater academic legitimacy to compete effectively within their institutions for resources. By enhancing a business school's reputation, research sometimes also translates into more resources from external sources, success in recruiting and retaining faculty, and new opportunities for revenue streams. Media rankings also motivate schools to invest in research by providing a channel to build academic reputation. Several media rankings of MBA programs, such as *BusinessWeek* and *Financial Times*, now include "intellectual capital" variables in their calculations, though there is considerable disagreement about the appropriateness of their measures. National ratings of research, which can be found in many countries, including the UK, China, and Australia, also play a role as

Clearly, there are powerful reputation and financial incentives at work to motivate business schools to invest in research.

inputs to funding formulas. Some schools have managed to convert faculty research directly into strategic advantage and create substantial revenue streams to support their mission. Clearly, there are powerful reputation and financial incentives at work to motivate business schools to invest in research.

For some schools, AACSB accreditation also plays a central role in motivating scholarly inquiry and research. Standard 2, also known as the "mission appropriateness standard," states that:

The school's mission statement is appropriate to higher education for management and consonant with the mission of any institution of which the school is part. The mission includes the production of intellectual contributions that advance the knowledge and practice of business and management.

To achieve this standard, schools must articulate their commitment to intellectual contribu-

tions in terms of content, audience, or both. Schools must display their portfolio of intellectual contributions in three categories: discipline-based scholarship; contributions to practice; and learning and pedagogical research. They must show that the portfolio is consonant with its mission, and demonstrate that the portfolio includes contributions from "a substantial cross-section of faculty in each discipline." Schools also must have clear policies that guide the development of intellectual contributions.

Standard 10, also known as the "faculty qualifications standard," states:

The faculty has, and maintains, intellectual qualifications and current expertise to accomplish the mission and to assure that this occurs the school has a clearly defined process to evaluate individual faculty member's contributions to the school's mission.

This Standard specifies requirements for academic and professional preparation, but more importantly, provides guidelines for "development to maintain qualifications." It specifies that "all faculty members are expected to demonstrate activities that maintain the currency and relevance of their instruction ... through a variety of efforts, including production of intellectual contributions, professional development, and current professional experience." To emphasize the connection between faculty qualifications (Standard 10) and mission appropriateness (Standard 2), the guidelines state that "while intellectual contributions are salient for both Standards, many other activities may be appropriate for showing that faculty members are acting to maintain their disciplinary currency and relevance." Carefully applying the definitions provided earlier in this report, this means that scholarly inquiry is required of all faculty, while intellectual contributions are expected to emanate "from a substantial cross-section of faculty from each discipline."

Regarding research expectations, AACSB accreditation standards have not been immune to criticism. For example, some participants complain that in practice AACSB accreditation standards have resulted in superficial "counting," with schools focusing on calculating the numbers of

Regarding research expectations, AACSB International's accreditation standards have not been immune to criticism.

publications by each faculty member and then attempting to identify whether the publications are in "top tier" or other level journals, deciding whether trade journals "count," arguing about acceptance rates of different journals, etc. In effect, peer review teams often find themselves dealing with arguments about how informal, non-peer reviewed working papers, white papers, consultant reports, and the like really are evidence of faculty research. They often find themselves debating whether a conference proceedings or online journal is acceptable evidence of intellectual contribution or how active involvement in consulting is the "functional equivalent" of research and more consistent with institutional missions. In reaction to "push back" from such debates, many peer review teams have simply focused on publications in traditional academic journals as the preferred metric for assessing faculty intellectual contributions. This

conflict about the appropriate metrics for assessing involvement in scholarship has led many to question the usefulness of AACSB's current approach.

Similarly, in seeking evidence regarding the maintenance of academic qualifications among faculty, which is different from the issue of providing evidence of intellectual contributions, again schools and teams often turn to easily verifiable items such as publications in academic journals. Though the accreditation guidelines state that a substantial cross-section must be involved in producing intellectual contributions, mixing the objective of sustaining academic qualifications and producing intellectual contributions from scholarly inquiry for assessment purposes has led to further confusion. For example, teams find themselves debating whether faculty members involved in executive education, where participants are both more knowledgeable and critical than full-time students, have to be seen as "involved with research about what works" in order to succeed with such students. In effect, their "experience" is seen as providing a knowledge base that is both relevant and current, i.e. a form of scholarly inquiry, despite the fact that their activities yield few intellectual contributions. This complex justification results from confusion about what might provide evidence of qualifications to teach and those indicators that would provide evidence of intellectual contributions that result from scholarly inquiry.

In part, these difficulties arise from the use of particular language. As discussed earlier, the term "research" tends to be interpreted to mean publication in standard journals and particular types of print media. Yet all the reasons for desiring, if not requiring, faculty involvement in "research" to maintain qualifications really focus on participation in scholarly inquiry that adds value to learning and practice. As noted in the 1987 Final Report of the AACSB Task Force on Research, scholarly inquiry can take many forms and reflect itself in teaching programs in a variety of different ways. It might involve inquiry into basic management and human behavior processes, exploration of particular management practices, or searches for better methods of effectively conveying information about management practices to different audiences. Such inquiry can come about through both theoretical and empirical efforts, be reflected in the activities of tenure track and non-tenure track faculty, and be characteristic of traditionally-trained scholars as well as practitioners who participate in instruction. Admittedly, some of these efforts would not be thought of as traditional "research" but all would be examples of potentially exciting and innovative scholarly inquiry, something that can and should be expected of all faculty. Support for such activity is certainly a responsibility to be accepted by every business school.

### **Individual Faculty Incentives**

The predominant model for faculty support found in business schools today focuses primarily on systems that reward excellence in scholarship and teaching with tenure and other forms of security and compensation. Promotions, especially to full professor, tend to be based on academic contributions and reputation largely determined by success in publishing in the most

respected peer-reviewed discipline-based journals. Similarly, publications in peer-reviewed discipline-based journals are viewed as the only ticket to success in the academic job market for scholars interested in advancing their careers and increasing their earning potential.

Critics of such a system argue that "the faculty reward system does not match the full range of academic functions (i.e. teaching, research, and service) and that professors are often caught between competing obligations."<sup>57</sup> They also note that tenure and other forms of job security take away any incentive for faculty to excel or improve. These tensions, real or simply perceptual, affect the incentives for producing various types of intellectual contributions in business schools.

Scholars focusing on contributions to practice and/or pedagogy often suffer from a lack of respect, integration, and advancement opportunities in academic environments.

This is not to suggest that such an approach has failed to heighten the legitimacy of business schools in the academic community. But one consequence has been that scholars focusing on contributions to practice and/or pedagogy often suffer from a lack of respect, integration, and advancement opportunities in academic environments. The Task Force was able to identify many examples of professors who were highly regarded among executives, and fellow academics for that matter, but who experienced difficult or negative

tenure decisions due to the breadth of their scholarship. These difficulties often arose from university-wide faculty promotion and tenure review committees or provosts who adhered to promotion standards stressing publications in academic journals most favored by traditional disciplines.

To further illustrate this dilemma for business school faculty, *Harvard Business Review* (HBR) articles are not reviewed by peers<sup>58</sup> and many are written by consultants or executives rather than academics. But it has a monthly circulation of 250,000 and great impact on practice. Tom Steward, the current editor, says that "it is a magazine about ideas, chiefly research-based, for practitioners. In that sense it distinguishes itself from scholarly journals on the one hand and business journalism on the other." It is easy to see that HBR has been successful in this regard. Kotter and Schlesinger's theory about resistance to change, Kaplan and Norton's Balanced Scorecard, Prahalad and Hamel's core competencies theory, and Kim and Mauborgne's Blue Ocean Strategy concept all appeared first in the publication. The argument is that the adoption rates for ideas appearing in HBR are quite high and reflected in reprint orders, etc. However, because it is not peer-reviewed and does not have a clear theoretical or empirical orientation, academics at many institutions diminish its importance, sometimes to nothing, in tenure and promotion cases. Not surprisingly, Anderson et al found that the number of refereed journal articles was ranked by faculty, deans, and other administrators as the most important item in evaluating faculty scholarship performance. Non-refereed publica-

<sup>&</sup>lt;sup>57</sup> Boyer, 1990, p.1

<sup>58</sup> Interestingly, AACSB's definition of peer review includes the type of editorial review conducted by HBR.

<sup>&</sup>lt;sup>59</sup> London, 2003, p. X

<sup>60</sup> See Kotter and Schlesinger, 1979; Kaplan and Norton, 1992; Prahalad and Hamel, 1990; and Kim and Mauborgne, 2004.

tions were ranked 10th, just before business/professional presentations, citations, and working papers as providing a basis for assessing scholarship.<sup>61</sup>

This is not to say that "popular" or "relevant" work is devoid of incentives, both pecuniary and non-pecuniary. Authoring books, consulting, etc. can pay handsomely. Non-pecuniary benefits can come in the form of status as faculty members extend their reputation beyond academic circles. In addition to growth in the number of popular magazines in business, executive and distance education programs provide opportunities to build and expand these reputations. Some business schools are finding ways to "own" and capitalize on the rights to more popular works by faculty, but for the most part are unable to capture a slice of the financial gains which go largely to the authors and publishers. Indeed, some business deans complain that academic support systems (e.g., research support, promotion, and tenure) serve to finance, legitimize, and expand the demand for faculty members who can contribute most directly to practice but do so outside the control and influence of business schools.

...faculty publishing in traditional academic journals can maximize their economic rewards, even if their work has little impact on practice. Ironically one can state the following: from a purely "within the business school's four walls" perspective, the economic incentives are clearly lined in such a way that faculty publishing in traditional academic journals can maximize their economic rewards, even if their work has little impact on practice. However, producing scholarship with a practice focus and having it appear in trade journals, books, or in software form can, in fact, maximize

overall income through consulting and other non-business school activities. Providing incentives for both basic and applied scholarship is a conundrum facing many business schools.

# Conclusions and Recommendations

Based on its analysis, the Task Force asserts that business school research creates substantial value for students, practicing managers, and society, as well as for business schools themselves. In support of this point and in addition to the examples provided above, Appendix 1 provides examples of research originating from business schools that the Task Force believes have had significant impact on management practice or public policy. The list is not intended to be all inclusive.

The Task Force believes that it is critical for business schools to find ways to continuously enhance the value and visibility of scholarship and research. Through its analysis, the Task Force has uncovered five issues that, if addressed by AACSB International, its member schools, and other organizations, could assist business schools to achieve their

It is critical that business schools find ways to continuously enhance the value and visibility of scholarship and research.

fullest potential from scholarship and research. First, current measures of intellectual contributions focus on inputs rather than outcomes. That is, the focus is on how faculty spend time (engaged in scholarship) and not on the value of outcomes produced (impact of scholarship on intended audiences). Second, business school and individual faculty incentives tend to create an overwhelming emphasis on discipline-based scholarship at the expense of contributions to practice and to pedagogical development. Third, the relationship between management research and teaching and the mechanisms to support their interaction, especially when these functions are not always performed by the same people, are not well-understood. Fourth, there are inadequate channels for translating academic research to impact practice. Fifth, opportunities to support deeper, more continuous interaction between faculty and practicing managers on questions of relevance have not been fully developed. In the next section, the Task Force develops several recommendations for overcoming these issues to increase the overall value and visibility of business school research.

### Recommendation #1:

Extend and augment AACSB International accreditation guidelines to require schools to demonstrate the impact of faculty intellectual contributions on targeted audiences.

In light of the background on AACSB accreditation provided in the previous section, the Task Force recommends changes to the accreditation guidelines to focus on the impact of faculty scholarship. This would not require a substantive change to the accreditation standards, but merely an extension and augmentation of the guidelines to focus on outcomes from investments in faculty scholarship. Specifically, the change would require schools to "make their

case" by going beyond counting refereed journal articles and other contributions (inputs) to demonstrate the impact of scholarship of all types (outcomes) on various audiences important to business schools.

Accreditation Standard 2 currently requires that policies guiding the development of intellectual contributions should clearly specify:

- The expected targets or outcomes of the activity;
- The priority and value of different forms of intellectual contributions consistent with the school's mission and strategic management processes;
- Clear expectations regarding the quality of the intellectual contributions and how quality is assured (e.g., specific target journals or outlets, selectivity requirements, etc.); and
- The quantity and frequency of outcomes expected over the AACSB review period.

If the real value of faculty scholarship is to inform teaching and learning, advance knowledge of theory, keep faculty aware and involved in issues of current interest, and improve aspects of management practice, then the focus should be on assessing the measurable "impact" of faculty scholarship in these areas.

The proposed change would require schools also to focus on the issue of impact for the products of scholarly inquiry. If the real value of faculty scholarship is to inform teaching and learning, advance knowledge of theory, keep faculty aware and involved in issues of current interest, and improve aspects of management practice, then the focus should be on assessing the measurable "impact" of faculty scholarship in these areas. Whether the form it takes is that of an article, case, book, or piece of software should not be the primary focus. This approach would parallel the move from curriculum standards to assurance of learning, be consistent with the underlying philosophy of accreditation, and reflect the original intent of the 1987 Final Report of the AACSB Task Force on Research.

Viewing impact measurement as a critical factor opens the way for both a more rigorous and yet more flexible set of metrics. AACSB would be encouraging each school to define a mix of faculty involvement in scholarship that fits with its mission. The intended and measured impacts of individual faculty scholarship when considered at the school level should reflect the strategic focus that is identified in the mission statement and strategic plan required for accreditation purposes. In aggregate, the evidence of impact should reflect the level of achievement of a school's mission. Such an approach also would encourage schools to be very careful about identifying the nature of scholarship being pursued and the articulation of output measurements. It would allow schools of different size, location and aspirations to further clarify their uniqueness and the role they would be playing in local, regional, and national economies. To

illustrate, Table 2 describes four models of how characteristics of the school and its mission might translate into expectations regarding intended impacts of scholarship along three dimensions. This table is not intended to be prescriptive or comprehensive. The main point is that the mission and strategy of the school should align with its expectations for scholarly impact.

Table 2. Impact of Mission Characteristics on Impact Expectations - Examples

Characteristics	Model A	Model B	Model C	Model D
Scholarship emphasis	Scholarship emphasizes learning and pedagogical research and contributions to practice	Scholarship emphasizes contributions to practice and learning and pedagogical research	Scholarship emphasizes contributions to practice and disciplined-based scholarship	Scholarship emphasizes discipline-based research and contributions to practice
General model of degree program emphasis	Mix of undergraduate programs that emphasize entry-level professional preparation	Mix of undergraduate and master's programs that emphasize professional preparation	Mix of master's programs that emphasize professional preparation and specialist careers	Mix of master's and doctoral programs that emphasize professional preparation, specialist careers, and research
MBA/specialized master's emphasis	No MBA/Master's programs	Small to medium sized MBA programs with significant part- time student and practitioner focus	Medium to large MBA programs, including full-time MBA and executive MBA	Large traditional student MBA, executive MBA, specialized master's programs
Doctoral program emphasis	No doctora	al program	Doctoral program that emphasizes practice and/or places graduates in teaching focused schools or industry	Large doctoral program placing graduates in research- focused schools
Executive education emphasis	No or only minimal faculty deployment to support executive programs		lty deployment cutive programs	Significant faculty deployment to support executive programs
Weighting of impact expectations	Teaching - Higher Practice - Moderate Theory - Lower	Practice - Higher Teaching - Moderate Theory- Lower	Practice - Higher Theory - Moderate Teaching - Lower	Theory - Higher Practice - Moderate Teaching - Lower

### **Measuring Outputs**

Identifying output metrics is critical from an institutional perspective in that it demonstrates a clear institutional commitment to scholarship and a return on that investment. It is also helpful from an individual faculty perspective in that it allows faculty groups to capitalize on differential talents and to provide guidance for developmental purposes. Individual contributions to the school's scholarly impact must be supported and monitored. For example, for every faculty member with responsibilities to contribute to a school's portfolio of intellectual contributions (which for accreditation purposes must be a substantial cross—section of faculty) the school should understand and track: (a) the focus of the effort (what is intended to be accomplished); (b) the product form to be produced (books, articles, sets of speeches involved); (c) the audience to be influenced by the effort (a discipline academic community, practitioners); and (d) the appropriate metrics to be used to assess impact on that audience (what constitutes evidence of "success").

Perhaps a few examples would help demonstrate the effect of such an approach. In each exemplar case there is identified one faculty member, the focus of scholarship, anticipated product form, target audience and possible metrics of impact.

### **Faculty Member Smith**

Focus of Effort: Improve manufacturing practice

**Target Audience:** Lean manufacturing practitioners

**Product Form:** Consulting reports, professional magazine reports, software, presentations

at industry association meetings, published article

Impact Measurement: Number of practitioners or firms adopting new approach or

developed practice, awards by industry or professional associations

### **Faculty Member Jones**

Focus of Effort: Improved teaching in accounting programs

**Target Audience:** Accounting faculty, students

**Product Form:** Cases, teaching text books, software

**Impact Measurement:** Adoptions and integration in curricula of schools

### **Faculty Member Brown**

Focus of Effort: Stimulation of popular thought about finance

Target Audience: General public, business press

Product Form: Books, monographs, speeches of national significance

Impact Measurement: Sales of book, number of regional/national/international

presentations, reviews in magazines (e.g., BusinessWeek, Forbes)

### **Faculty Member White**

**Focus of Effort:** Advance basic knowledge of underlying processes through new theory or empirical explorations

Targeted Audience: Fellow academic scholars

Product Form: Article in top tier academic journal

**Impact Measurement:** Publication in discipline journals, differentiating success by quality of journal, citations, etc.

The above are intended as examples only. Some faculty may cut across many focus areas. In some cases, the focus of effort, targets, and product forms may evolve over the course of a faculty member's career. For example, a faculty member may concentrate on advancing basic knowledge initially, but eventually begin to focus efforts on improving teaching and learning. Regardless, the underlying philosophy is that AACSB International and business schools should be interested in a measurement of output that would accomplish three things. First, it would provide evidence that faculty have some involvement in scholarship regardless of the focus of that intellectual pursuit. Second, once a scholarship type or focus is identified by a faculty member there would be an assessment of the influence or impact that outcome has had on a target audience. That is, it would measure not simply intent or input to the process of scholarly inquiry but focus on the different measurable outcomes that should flow from effective scholarly inquiry (i.e., the added value that comes from a commitment of time, energy, talent, and institutional resources to the pursuit of either acquiring or transmitting new information). Third, this approach would be consistent with efforts to demonstrate greater accountability for business school performance over and above simply counting student credit hours generated.

AACSB must take the lead in helping business schools develop useful and appropriate measures of impact, as well as systems for collecting and maintaining the data.

It should be apparent that such an approach will place additional burdens on schools for reporting purposes. Clearly, AACSB must take the lead in helping schools develop useful and appropriate measures of impact, 62 as well as systems for collecting and maintaining the data. Through ongoing research, publications, online resource centers, conferences, and seminars, AACSB is well-positioned to advance the understanding and application of impact measures among business schools.

Offsetting the additional burden is the reality that it would encourage a closer integration between institutional mission development and processes for individual faculty performance planning and appraisal. Such close integration is at the heart of accreditation processes for without such linkage there can be no assurance of effective, long-term curriculum delivery and, therefore, contribution to creating the high-quality managerial and leadership talent required for the future success of business schools and our economy.

This recommendation emphasizes that there should be an alignment between the scholarly activities of faculty and the institutional mission. That is, the distribution of types of faculty within a business school should be supportive of the overall unique mission. In a similar fashion, school incentive and support systems should be configured to reward those faculty contributing in ways most consistent with the institutional mission.

It will be necessary to gain the acceptance of key university officials such as presidents and provosts, as well as faculty promotion review committees.

One major concern with this proposed approach is that of institutional acceptance. That is, schools and colleges of business reside within larger educational institutions where the traditional "coin of the realm" is publication in toptier academic journals. If there is to be

acceptance of a more distinctive standard for desired scholarly inquiry and contribution within business schools, it will be necessary to gain the acceptance of key university officials such as presidents and provosts, as well as faculty promotion review committees. Individual schools can certainly develop the case for such an approach, but it will become critical for AACSB to act proactively to influence the views of such decision makers. This will require presentations and meetings with university officials and a visible presence as the voice of business education at national and international meetings of university officials. It also may be important for AACSB to organize corporate voices to make the case for such inclusiveness. Providing such an assertive and effective "advocacy voice" will be a relatively new activity for AACSB but it will be essential for these changes to be effective.

To implement these suggestions AACSB also will have to revise the data gathering process for accreditation reviews and the training of peer review team members. If we retain the current forms that stress peer-reviewed publications, and continue to allow peer-review teams to focus only on these outcomes, we will not secure the changes essential to the long term

success of business education. We are professional schools and colleges with a need to stay connected to practice, as well as theory and pedagogy, although the relative emphasis on either of these will and should vary with the specific mission of a school. That adds a complexity to all our lives, but it enriches our programs and the added value we provide to students, as well as faculty. It is time for peer review processes to reflect such diversity in data collection, as well as accreditation assessments.

This recommendation focuses on implications for Standard 2. The question of academic or professional faculty qualifications (Standard 10) is related, but is not directly impacted by this recommendation. Requirements for academic qualification address issues of prior educational preparation, as well as the continuity of scholarly inquiry and contribution. Thus, while a school might well be able to make a case that, in the above examples, faculty like Smith, Jones, Brown, and White should be seen as academically qualified based on demonstration of scholarly impact, doing so would involve its own policies and processes related to Standard 10. For example, a school might make ongoing scholarly inquiry necessary for academic qualification, but not all scholarly inquiry leads to intellectual contributions and not all intellectual contributions will have impact.

Finally, it is important to remember that regardless of "type of faculty member" (see Smith, Jones, Brown and White examples above) the assessment is based on the quality of scholarly contributions. First, simply being involved in scholarship is not sufficient. Second, even if "outputs" are created, that alone is not sufficient as the outputs should have high-quality "impact." For example, for a business school with a mission to improve the quality of student learning experiences, a faculty member whose scholarship is designed to affect teaching in accounting, with an output that is in the form of a software program, and an assessment metric of the number of schools using the software, adoption of the software by the host school in a course conducted by that faculty member does not demonstrate high-quality impact. At some point, there must be an assessment of the "quality" of the outcome of scholarship, whether that is done by the school or visiting peer-review teams.

### Recommendation #2:

AACSB should encourage and support efforts to create incentives for greater diversity in institutional missions and faculty intellectual contributions.

Diversity is fundamental to the AACSB philosophy and to the AACSB International accreditation process. However, the underlying systems and practices in collegiate business education often seem to bound schools and faculties to focus on basic research—especially the type published in refereed academic journals—regardless of the school's mission. Given the overwhelming influence of academic evaluation and reward systems and confusion regarding AACSB International accreditation standards, the Task Force believes that too few business schools have been willing or able to make a commitment to design appropriate systems that support contributions to practice and learning and pedagogical research.

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Changing the incentive structure for business faculty will be challenging, to say the least. One route is to accept and encourage faculty models that more effectively integrate, reward, and build on diverse approaches to scholarship. Robust AACSB International accreditation standards already handle a wide range of faculty evaluation and

reward structures that are consistent with the missions of a diverse set of schools. But what if AACSB went a step further to require business schools, if applicable to their mission, to demonstrate they have faculty systems that support and reward practice-oriented or pedagogical contributions in addition to basic research published in refereed journal articles? More schools may be motivated to create multiple faculty tracks. The end result could be to create more vibrant "practice-scholar" or "teacher-scholar" markets among business schools, thus improving academic mobility among faculty who focus more on practice or pedagogy in their research. Alternatively, AACSB might assist in developing faculty models that support "translational" research by clinical scholars who understand and interact with business to test and refine results from basic research and help to define problems of mutual interest. This model might build on existing "centers," which are common among business schools, and create simulated practice fields for academic research. The primary issue will be to support models that clearly align institutional mission with the types of intellectual contributions expected of faculty.

Again, we should emphasize here that this recommendation must be supported by efforts to advocate for a more distinctive approach to faculty and research in business schools. Expanding AACSB's role in communicating with university presidents, provosts, and academic units across university campuses about the importance of contributions to practice and teaching, as well as theory, will be critical.

### Recommendation #3:

AACSB should support, perhaps in conjunction with professional associations such as the Academy of Management, studies examining the linkage between scholarly inquiry and education in degree and non-degree programs.

As discussed above, implicit in accreditation standards is an assumption that scholarly inquiry is necessary to maintain academic qualification to teach and intellectual contributions of all types presumably contribute positively to high-quality education. Furthermore, the most obvious way that faculty research impacts practice is through education. AACSB International accreditation standards require faculty involvement in designing curricula, developing courses, and delivering instruction in degree programs, but the explicit relationship between research and teaching is not well understood. Current accreditation standards do not require schools to demonstrate how faculty scholarship by their own and other faculty contributes to degreebased education (e.g., how such scholarship is integrated in course work). The Task Force recommends that AACSB undertake a comprehensive study of the relationship between research and teaching and, based on the results, consider developing recommendations to increase the positive impact of research on education and learning. Among the issues to consider are lag times in textbooks, effectiveness of various instructional resources, impact of information technology, and the role of teaching and pedagogical research. The AACSB International study also should address complex questions about faculty deployment, mechanisms to support interaction between faculty and students, implications for curriculum integration, and motives for innovation. Finally, such a study would have to incorporate the notion that varying forms of scholarship by different faculty constitute the base for curriculum development. Thus, it is a college-wide issue to be assessed and not one of individual faculty linkage to scholarly inquiry and teaching.

The Task Force also recommends that AACSB examine ways to build on the significant role that executive non-degree education plays in informing and disseminating academic research. By bringing together practitioners and academics on focused topics, executive education holds

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great potential to strengthen the linkage between research and practice. Yet, the scale and impact of these efforts is not sufficiently understood and appreciated. For example, other than considering its impact on the resources to support degree-based education, non-degree "executive" education is not considered as integral to AACSB International accreditation. Business schools are neither required to provide executive education, nor to demonstrate its quality and impact even when it is a significant part of their mission.

### Recommendation #4:

# AACSB should develop an awards program to recognize and publicize high-impact research by faculty.

This awards program could bring much-needed visibility to business school research and provide additional incentives for faculty and schools to conduct research that impacts knowledge of theory, practice, or teaching. One challenge will be to sufficiently differentiate AACSB International awards from those already presented by other organizations. The program might create separate awards by type of intellectual contribution (e.g., discipline-based scholarship, contributions to practice, or learning and pedagogical research), focus on interdisciplinary

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contributions, or recognize individuals for a track record of high-impact research. Alternatively, the program might involve partnerships (e.g. co-sponsorships) with faculty discipline associations to draw attention to and publicize the contributions of their award winners.

Many faculty-discipline associations already present awards for research that contribute significantly to practice. <sup>63</sup> For example, the American Marketing Association's Paul E. Green Award "recognizes the best article in the Journal of Marketing Research that demonstrates the greatest potential to contribute significantly to the practice of marketing research."

The criteria for the Academy of Management Scholar Practitioner Award includes excellence in one or more of the following categories: (1) successful application of theory or research in practice and/or contribution to knowledge through extraction of learning from practice; (2) authored scholarly works which have substantively affected the practice of management; (3) integration of research and practice. The purpose of the Franz Edelman competition, presented by INFORMS, is to "call out, recognize and reward outstanding examples of management science and operations research practice in the world." The American Finance Association's Fischer Black Prize is awarded for "a body of work that best exemplifies the Fischer Black hallmark of developing original research that is relevant to finance practice." The Wildman Award is given annually for work that "is judged to have made or to be likely to make, the most significant contribution to the advancement of the practice of accounting (including audit, tax, and management services)."

### Recommendation #5:

AACSB should develop mechanisms to strengthen interaction between academics and practicing managers in the production of knowledge in areas of greatest interest.

The primary objectives of this mechanism would be to (a) inform and motivate academic research in areas that are of greatest practical interest and (b) strengthen interactions between

academic and practicing managers in the creation of knowledge. This approach would be designed to overcome the challenge of producing research that is of value to both practitioners and academics. This mechanism is expected not only to encourage more applied research, it also is based on the belief that stronger academic engagement with practice also will improve and advance basic research.64

Stronger academic engagement with practice also will improve and advance basic research.

There are several current initiatives designed to address at least one of the objectives. For example, the Marketing Sciences Institute (MSI), which has a research mission to "stimulate, generate, and disseminate high-quality research that has the potential to impact practice," might serve as a model for this initiative. MSI member companies vote to establish research priorities, which are circulated among marketing academics for proposals. Innocentive.com offers a similar, but more commercial, model in the sciences. In their model, companies contract with Innocentive as "Seekers" to post R&D challenges. Scientists register as "Solvers" to review challenges and submit solutions. The Seeker reviews submissions and selects the best solution, which receives a financial award.

This recommendation can build on promising new thinking about how to organize research. For example, Van de Ven and Johnson propose a method of engaged scholarship, which they define as "a collaborative form of inquiry in which academics and practitioners leverage their different perspectives and competencies to co-produce knowledge about a complex problem or phenomenon that exists under conditions of uncertainty found in the world."65 Also of potential benefit are recent studies that explore the history of research that has mattered or the life cycle of management ideas in order to gain a better understanding of the how relevant knowledge is created. For example, Ford et al describe "four important contributions to management understanding that were prompted by the organizational experiences of a group of inquiring managers and curious researchers."66 David and Strang trace the life cycle of total quality management and examine the role of consultants, academics, and practitioners.67

The Task Force emphasizes that this recommendation must go beyond facilitating professional interactions among academic and practice communities. It also emphasizes the need for solutions that improve access to business for research purposes. This means making the case

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for how the research will impact organizations and resolving complex issues related to intellectual property and employee protection that have over time made it more difficult for academics to study behaviors and practices in organizations.

### **Recommendation #6:**

AACSB should study and make recommendations to the business and management journal community designed to highlight the impact of faculty research.

The Task Force recommends that AACSB undertake a comprehensive study of business and management journals to better understand their impact on academic and practitioner communities, review processes, and futures. Initial AACSB research in this area indicates that a number of academic journal editors would like to increase readership among practitioners, but do not envision changes in the types of articles published or review processes necessary to support such an expansion. Some business faculty also have argued that developments in academic publishing have limited opportunities for valuable interdisciplinary business research.

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Another concern relates to the lengthening of "turnaround time" for manuscripts, which many argue have made traditional journals less relevant given the increasing pace of change in business and the powerful distribution potential of the Internet.

Recommendations from this study might include suggestions about how academic journals can increase their relevance to practicing managers or to management education. For example, *Management Science* now requires authors to write a "compelling Managerial Relevance Statement." Each issue of *Management Science* includes a brief section at the beginning entitled "Management Insights," which is intended to complement the journal's mission to publish "scientific research into the problems, interests, and concerns of managers." Based on this study, AACSB may go further to recommend new models or new outlets for business school research. For example, AACSB might spearhead periodic special issues on topics of relevance to business communities or the creation of a new, interdisciplinary perspectives journal. Perhaps this study will yield new ways of thinking about how research should be reviewed and disseminated using the Internet.

The Task Force recommends that specific attention be given in the study to analyze the potential for AACSB to create new distribution channels to increase the overall visibility and impact of academic research. This initiative might include an

Based on this study, AACSB may go further to recommend new models or new outlets for business school research.

annual compilation of "high-impact" research or a periodic newsletter that "translates" academic research for practitioner communities. Although academic research does not always lend itself directly to translation, AACSB might consider how research needs to be "rewired" or "extended" to create additional value. Another approach might be to focus on contributions that have little current academic attractiveness but address the "so what" issue of interest to practitioners. This effort might build on a newly-introduced *BizEd* section that distills the main contributions from business school faculty research. Unfortunately, *BizEd* currently has more relevance to the business school community than the practitioner community. In addition to issues related to content acquisition and intellectual property, the absence of significant relationships between AACSB and business communities presents an important obstacle. It will be difficult to envision proceeding on this recommendation without developing meaningful collaborations with existing organizations, such as the Conference Board, Aspen Institute, and other discipline-specific practitioner associations like the Society for Human Resource Management, American Marketing Association, etc.

### Recommendation #7:

# AACSB should identify and disseminate information about best practices for creating linkages between academic research and practice.

Many schools have created practice-oriented research centers, developed innovative funding mechanisms, and initiated effective research collaborations between business and faculty. Others have built successful basic research projects with other departments on campus, such as engineering, biosciences, and psychology. Some schools have capitalized on pedagogical research (e.g., cases) and instructional resource development (e.g., databases, simulations) to create significant revenue streams. Successful examples of processes that result in the creation of high-quality basic research, practice-relevant contributions, and resources to enhance learning could be studied and profiled on a "scholarship" resource center for business schools. AACSB could devote time in conferences or space in publications to such best practices.

Related to this is the need for greater recognition of the value of multi-and-interdisciplinary research. Given the nature of organizations and economic activity, many of the highest value-added solutions to problems require the integration of perspectives from multiple disciplines. Thus, activities to highlight and emphasize the value of such cross-disciplinary or boundary-spanning business school research efforts are likely to have greatest impact on actual practice, as is the recognition of explicit business school efforts to support such initiatives.

# Appendix

Additional intellectual contributions that have had an impact on practice or policy.

TOPIC	AUTHORS	SAMPLE CITATION
Sampling Problems in Auditing	W. Kinney	A Decision-Theory Approach to the Sampling Problem in Auditing, <i>Journal of Accounting Research</i> , 1975
Valuing Intangible Assets Financial Statements	B. Lev	Intangibles: Management, Measurement and Reporting, 2001
Statistical Methods for Simulation	G. Fishman	Concept and Method in Discrete Event Digital Simulation, 1973
Information in Supply Chain Management	H. Lee, V. Padmanabhan, S. Wang	Information Distortion in Supply Chain: The Bullwhip Effect, <i>Management Science</i> , 1997
Value of Information Technology	M. Hammer and G. Mangurian	The Changing Values of Communications Technology, Sloan Management Review, 1987
Path-Goal Theory of Leadership	R. House	A Path-Goal Theory of Leader Effectiveness, Administrative Science Leadership Review, 1971
Organizational Decision Making	J. March, M. Cohen, J. Olsen	A Garbage Can Model of Organizational Choice, Administrative Science Quarterly, 1972
Measuring Service Quality	B. Parasuraman, L. Berry, V. Zeithaml	A Conceptual Model of Service Quality and Its Implications for Future Research, <i>Journal of Marketing</i> , 198
Managing Technology	C. Christensen	Exploring the Limits of the Technology S-Curve, Part 1 and Part 2, <i>Production and Operations Management Journal</i> , 1992
Single-loop and Double-loop Learning	C. Argyris, D. Schön	Organizational Learning, 1978
Knowledge Creation	I. Nonaka	The Knowledge Creating Company, Harvard Business Review, 1991
Learning Organization	P. Senge	The Fifth Discipline: The Art and Practice of the Learning Organization, 1990
Stock Option Back-dating	E. Lei	On the Timing of CEO Stock Option Awards. Management Science, 2005
Goal Setting	G. Latham, E. Locke	Goal Setting - A Motivational Technique that Works. Organizational Dynamics, 1979
Motivation	F. Herzberg	One More Time: How Do You Motivate Employees? Harvard Business Review, 1968
Rewards	S. Kerr	On the Folly of Rewarding A, While Hoping for B. Academy of Management Journal, 1975
Poverty and Business	C. Prahalad, A. Hammond	Serving the World's Poor, Profitably.  Harvard Business Review, 2002
Strategy	M. Porter	Competitive Advantage, 1985
Transformational Leadership	B. Bass	Two Decades of Research and Development in Transformational Leadership, European Journal of Work & Organizational Psychology, 1999
Costs of Downsizing	W. Cascio	Downsizing: What Do We Know? What Have We Learned? Academy of Management Executive, 1993
Turnover	T. Mitchell, B. Holtom, T. Lee	Why People Stay: Using Job Embeddedness To Predict Voluntary Turnover.  Academy of Management Journal, 2001
NT	11	

Note: The table is intended only as a small set of examples to complement others provided in this report.

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# About AACSB International

AACSB International advances quality management education worldwide through accreditation and thought leadership.

AACSB International – The Association to Advance Collegiate Schools of Business is a not-for-profit corporation of educational institutions, corporations, and other organizations devoted to the promotion and improvement of higher education in business administration and management.

Founded in 1916, AACSB International established the first set of accreditation standards for business schools in 1919. For more than 90 years, it has been the world leader in establishing and maintaining business school accreditation standards.

In addition to accrediting business schools worldwide, AACSB International is the business education community's professional development organization. Each year, the association conducts a wide array of conference and seminar programs for business deans, faculty, and administrators at various locations around the world. The organization also engages in research and survey projects on topics specific to the field of management education, maintains relationships with disciplinary associations and other groups, interacts with the corporate community on a variety of projects and initiatives, and produces a variety of publications and special reports on trends and issues within management education.



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