

Impact of Research

A Guide for
Business Schools

Insights from the AACSB International
Impact of Research Exploratory Study

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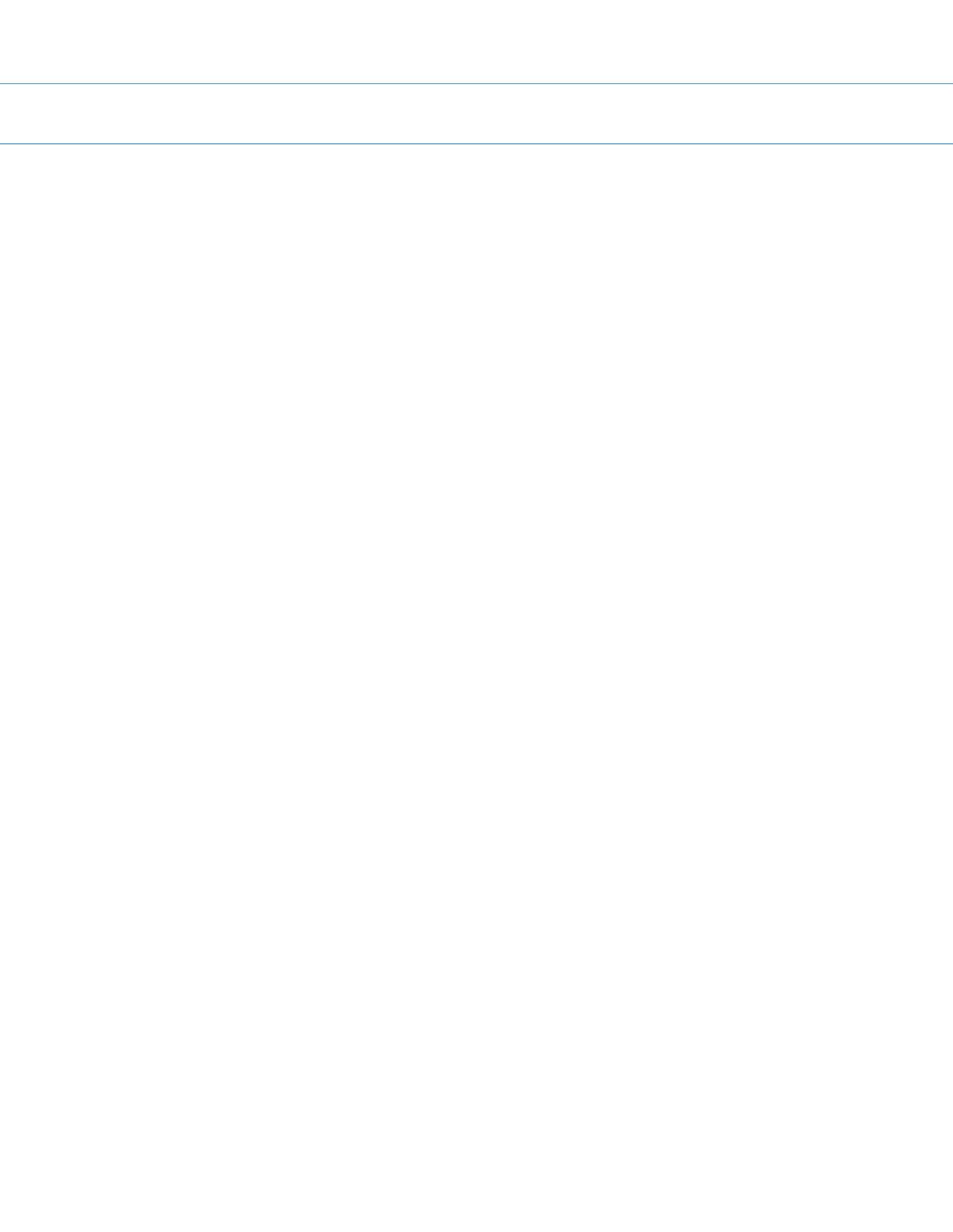
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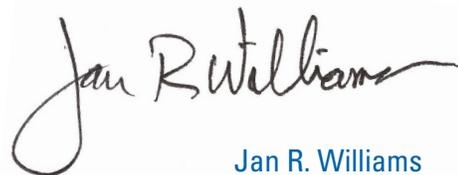
FOREWORD

Research by business school faculty helps develop curricula and course content, contributes to the intellectual climate of the institution, and elevates the academic reputation of the business school on campus. But to what extent have our research and other intellectual contributions actually advanced business and management theory, practice, and/or education? I think the answer is a lot.

We decided to explore the question of research impact while preparing our fifth year maintenance report here in the College of Business Administration at the University of Tennessee at Knoxville. The result was reassuring and, more importantly, the process helped us to better understand and articulate what we expect to achieve from our research as a school. The exercise helped us to think strategically about how research contributes to our mission and fits into the full range of activities in which we engage. Additionally, the information we generated will assist our peer review team to offer valuable suggestions.

Our effort was motivated by the belief that, in the future, business schools will have to be more strategic about their research investments and more explicit about assessing the return—not because AACSB will require it, but because stakeholders are starting to demand it. Every business school must prepare for this change. I was a member of the original AACSB Impact of Research Task Force, which evaluated the status of research in business schools and recommended a stronger focus on outcomes and on diversity of research missions in AACSB Accreditation. That report also suggested several ways to increase the value and visibility of business school research. In my leadership role, I also have had the opportunity of tracking the three-year exploratory study that followed the original report and provided the insights for this guide.

Since the 1960s, AACSB has been a staunch advocate for research in business schools. Research is central to quality management education. This publication reflects AACSB's commitment to research and the belief that the nature of and expectations for business school research are changing. It is designed to help business schools and their leaders prepare for and capitalize on these changes to create more value and impact from their research activities.



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HOW (AND WHY) TO USE THIS GUIDE

Investments in research are a tremendous commitment by AACSB-accredited business schools and by many schools that aspire to one day join those ranks.¹ At the average accredited school, salaries account for 83% of what is spent in any given year, and at two of every five schools, the portion of expenditures going to salaries exceeds 90%. This cost would certainly be lower if schools were uninterested in a professoriate trained to create knowledge and apply it to new contexts or if schools provided compensation only for faculty members' time spent in the classroom. So why do schools value (and pay for) this kind of activity?

In her 2003 foreword to a report of the Doctoral Faculty Commission to AACSB International, Carolyn Woo (then chair of the AACSB International Board of Directors) refers to scholarship as “the very core of collegiate business schools and institutions of higher education.”² She goes on to argue that:

[d]octoral faculty produce the body of knowledge that sustains intellectual inquiry and the ongoing development of a discipline. Any diminishment of our shared objective to advance such knowledge and ground education in solid conceptual frameworks will be a threat to the eventual academic legitimacy of our discipline. At a time when organizations operate in incredibly complex and dynamic environments, when different norms are colliding, and leadership credibility is at the lowest, such a retreat will compromise our ability to serve students and other constituents.³

The *Final Report of the Impact of Research Task Force* expands on those sentiments by making the case for the important role of research in business schools.⁴ The report further explores the specific value propositions of research (as well as the related, yet broader, practice of scholarship) to students, practicing managers, and society. Yet it also exposes an opportunity for business schools to increase the overall value and visibility of the research they support.

The need for business schools to pursue these opportunities may never have been so critical. At a time when many schools around the world are facing budget cuts, schools must ensure they are using resources efficiently to achieve stated objectives. Furthermore, given growing pressure from various stakeholder groups—namely students, their parents, and legislators—to make higher education more affordable, the ability of schools to articulate the impacts of their investments in scholarship on students' educational experiences and on the broader communities they serve is essential.

1 As required by Standard 2, accredited schools have a mission that “incorporates a focus on the production of quality intellectual contributions.”

2 AACSB International, 2003, p. 4

3 Ibid.

4 AACSB International, 2008

Meanwhile, the debate about how to *measure* research output, value, and/or impact continues in many broader forums:

- among scholars who bemoan that the current state of business school research leaves much to be desired;⁵
- among citation counters who strive to determine a better method of using this data in a meaningful way;
- among practitioners who have funds to support business school research or an interest in collaboration with business schools, if they could show evidence that the investment impacts their bottom line; and
- among constituents of governments, such as those in Australia, New Zealand, and the United Kingdom, that seek indicators of research quality as a basis for allocating funds to higher-education institutions.

The extent of this debate suggests that there is no easy answer and no perfect *measure*. The very fact that the debate is sustained, however, suggests the need for a better understanding of what schools are doing—and doing well—and for others to learn from and build upon these experiences.

The insights in the pages that follow draw upon the experiences of ten business schools that volunteered to participate in an exploratory study following the release of the *Final Report of the Impact of Research Task Force*. The study was intended to determine the overall feasibility of schools undertaking more concerted efforts to assess the impact of intellectual contributions, assess the burden and costs to schools, and begin to explore appropriate measures of impact. Each school dedicated considerable time and energy toward reflection, discussion, planning, and finally sharing its experience with peer review team members, AACSB staff and volunteers, and other schools. The Impact of Research Implementation Task Force, appointed to oversee the study, intentionally provided little guidance to the schools beyond the general direction and objectives of the study, leaving the schools considerable flexibility to experiment with different approaches. Altogether, the experiences of the participating schools highlighted the diverse priorities, contexts, internal administrative structures, and strengths of the different schools involved. No two schools approached the exploratory study in the same way.

The pages that follow are not intended to set an expectation for performance or mandate action by schools. They do not call for specific internal processes within schools or for reports to AACSB. Instead, they represent insights from observing one set of schools' experiences, shared for the purpose of informing other schools that face similar objectives, in the spirit of helping schools make investments that support mission achievement. Quite simply, this report is intended as a resource to assist any business school that seeks to better understand the connection between the research activities it supports and the school's mission, target objectives, and stakeholders.

5 James Walsh (2011), in his Academy of Management Presidential Address, lists several examples.

The potential benefits of achieving this task include a greater awareness of the role of the research aspect of the school’s mission and its relation to other mission-driven activities, such as teaching and outreach. This insight can lead to a stronger school identity or, in the words of one participating school, “a conscience among faculty [members]” who have an enhanced mutual understanding of how they contribute (or can contribute) meaningfully to that aspect of the mission.⁶ Furthermore, this understanding can ultimately have implications for the institution’s strategic planning and enable the school to better articulate the added value its investments in scholarship provide to important stakeholder groups.

As would be anticipated, however, such an exercise is not without costs—requiring both financial and human resources—and the exploratory study revealed risks that some approaches to measuring and articulating research impact could involve costs that far exceed the value created. The insights presented within this guide are designed to mitigate that risk by suggesting ways that schools might filter the wide range of potential approaches to those that are most appropriate to the school and most likely to yield value. Nevertheless, the school must undertake any such exercise with the proper expectations.

⁶ AACSB appreciates the candor with which participating schools discussed their experiences, as this openness greatly enhanced the quality of insights yielded through the exploratory study. For this reason, and because of the integration of the study with each school’s maintenance of accreditation review, quoted material from specific schools will remain anonymous throughout this report.

SETTING PROPER EXPECTATIONS FOR THE EXERCISE

Schools that undertake any initiative to better understand the outcomes of investments in research will do so for a variety of reasons, and their approaches will differ as a result. Some will choose to emphasize the process of introspection, seeking to better define or reinforce aspects of the school's mission (e.g., as part of recurring strategic planning exercises). Others will be more interested in benchmarking against peer or competitor institutions, or against themselves over time. Some schools will use the process to identify opportunities to enhance marketing and communications to certain constituent groups. Others will be motivated by the need to generate or sustain financial support (whether in the form of public funds, private grants for research initiatives, etc.).

Not all of the guidance and examples in the pages that follow will apply evenly across schools and situations. Rather than chronicling the exact experiences of each school in the exploratory study, examples from each experience are used to provide a holistic picture of the approaches taken in order to provoke introspection, exploration, and debate about the best approach for others.

The findings are presented in three sections that correspond generally to objectives that a school might seek to achieve through such an exercise. The objectives and related insights build upon one another to suggest avenues and critical questions for schools that seek to define overall research expectations, produce evidence consistent with their practices and expectations, and then reflect on the relationship of the results to their missions and visions:

I. Defining Research Expectations

Who are we as a school, and what are we aiming to accomplish through our research?
What might our "Statement of Impact Expectations" be?

II. Exploring Possible Measures

Is it possible to assess whether or not we are achieving those expectations? What metrics might we use?

III. Using and Communicating What Was Learned

What have we learned about our school through this process? Are there insights from this process that inform other actions or decisions? Are we effectively communicating about our scholarship to relevant audiences?

Notably, exploratory study participants were remarkably consistent in their expressions of the reflective value of their experience. As one school reported, “[T]his project provided an excellent opportunity for our faculty to step back and consider the impact of their research efforts in terms of the advancement of knowledge and practice in business and management. We are a school that spends much time in reviewing our mission and strategic plan, so the [Exploratory Study] self-assessment was a natural continuation of this self-study ongoing process.”

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Benchmarking proved to be more difficult. As discussed at greater length in a later section, the customized measures that allow a school to focus narrowly on unique mission-driven objectives do not often lend themselves to comparability with other schools, which may define even similar objectives differently.

The study also reinforced that several very real limitations prevent a comprehensive assessment of impact, and these limitations must be acknowledged and prepared for so expectations are not set too high. Many of these are explored throughout the pages that follow, but two are worth initial mention because they are fundamental to setting appropriate expectations for the exercise.

First, demands on faculty members and administrators to provide information are often already great. The resources available to compile data may be limited, making a cost-benefit assessment of the effort required to pursue such an exercise important. Typical data collection challenges are to be expected. One school listed such challenges as “varying participation rates across departments, problems with double-counting joint-authored articles, and faculty not able to spend the time needed to collect citation data,” noting that it sought to overcome the latter challenge by involving graduate student assistants. Schools unable or unwilling to commit the resources required for measuring outcomes may still find value in the process of exploring research expectations.

Finally, expecting the same level of benefit from repeated exercises year after year may not be reasonable. Representatives from one participating school expected the “favorable effect [of the reflective process] to decrease in the future, consistent with a declining learning curve.” They and others suggested that the value of the self-reflection might be greatest when the exercise is somewhat discontinuous, such as a part of recurring efforts to develop a five-year plan instead of something done on an annual basis.

DEFINING RESEARCH EXPECTATIONS

In its report, the Impact of Research Task Force asserted that each business school has “a right and responsibility” to define its research priorities.⁷ Translating those priorities into research expectations is the natural next step; this step requires going beyond identifying the school’s relative emphases on basic, applied, and pedagogical research. A school, for example, that places its highest emphasis on applied research might articulate expectations related to local industry concentrations (e.g., energy), specialized programs or concentrations being offered (e.g., innovation), or a particular aspect of its mission (e.g., economic development). Authenticity, as discussed further below, is key.

Equally important to this exercise is that the school frames research expectations in terms of the school and not individual faculty members. Expectations for research among individual faculty members are likely to be motivated primarily by the need for individuals to continue to develop professionally and to maintain currency in the field of teaching. Expectedly, some research activities that are critical for these purposes will not necessarily align with the general research priorities defined by the school through its mission. For example, a faculty member hired to teach Business Communications courses to undergraduates might be filling a critical educational need, and the school would likely expect that faculty member to stay abreast of and contribute to new developments in the field of business communications. However, the school itself may not necessarily identify business communications research as an overall priority or area of emphasis.

In fact, achievement of a school-level expectation of scholarly impact (for example, on a local industry sector) might depend on contributions from a wide range of individuals, such as marketing, management, and finance faculty members as well as professional staff members who cultivate relationships with industry representatives and translate or communicate research findings to the appropriate audiences. Similarly, research outcomes related to the advancement of knowledge in a particular discipline or the identification of new and improved teaching methods might result from collaborative or combined efforts involving multiple individuals.

The guidance below is offered to assist schools with the process of defining their research expectations.

1. Align research expectations with the school’s mission (i.e., be authentic).

Because it is so fundamental, the alignment of research expectations with the mission of the school is easy to overlook, particularly given external pressures for schools to pursue paths with which their strengths are not aligned. Yet that alignment is a critical starting point if schools are to reap any benefit from this exercise. Pouring time and energy into assessments of objectives that are unimportant or irrelevant is not only a waste of precious resources, it risks creating discouragement and frustration. Done well, the alignment of research expectations with the mission can bring greater clarity to the school’s purpose and create cohesiveness among faculty members and staff.

⁷ AACSB International, 2008, p. 13

The more clearly the role of intellectual contributions is articulated in the school's mission, the easier this step will be. The box below contains excerpts from the mission statements of three schools that participated in the exploratory study. These excerpts hint at the differing approaches each school took toward defining impact expectations and exploring potential measures.

Case in Point: Align expectations with the school's mission.

The Carlson School of Management at the University of Minnesota emphasizes the discovery of transformative knowledge by its faculty, in accordance with the school's mission:

The mission of the Carlson School of Management is to *discover* transformative knowledge about the issues faced by organizations and managers in a dynamic global economy and to create exceptional learning and career *opportunities* by facilitating an engaged and integrated *community* of scholars, students, and practitioners.

The Schroeder Family School of Business Administration at the University of Evansville is a school that emphasizes teaching above all else, but its mission also draws attention to the important role of research:

The mission of the Schroeder Family School of Business Administration is to provide a life-transforming, high quality, innovative business education within a liberal arts and sciences framework. The school's faculty engages in the creation of knowledge through scholarship and provides its students with experiential learning and a global perspective that will enable them to engage the world as informed and ethical business professionals.

The QUT Business School at the Queensland University of Technology pursues a mission that reflects long-standing connections with industry, government, and the professions and that aligns with the broader positioning of the university of which it is a part:

The mission of the QUT Business School is to provide quality, real-world-focused teaching, research, corporate education and service which is internationally relevant and respected.

[Among the items identified in the Queensland University of Technology's overall vision for the future is that the university will "undertake high-impact research and development in selected areas, at the highest international standards, reinforcing [its] applied emphasis and securing significant commercial and practical benefits for the community and for [its] partners."]

An important question to address at the beginning of the exercise is thus how the mission of the school (or the university with which it is affiliated) drives decision-making about the kind of impact the school desires. For example:

- Does the institution desire to impact the development of theoretical models that deepen the relevant profession's understanding of the disciplines under study? (In finance, examples of this would be Black-Scholes Option Pricing, CAPM, Modern Portfolio Theory, etc.)
- Does the institution desire to demonstrate application of business theory so as to inform academics and practitioners as to how to apply business principles more effectively?
- Does the institution desire to demonstrate pedagogical practices that produce enhanced student learning opportunities?
- Does the institution desire to create interdisciplinary paradigms that students can apply in varied and new situations (the liberal learning model)?
- Does the institution value consulting or other forms of external engagement with the community or professions? What is the relation of such activities to other research expectations?

Furthermore, depending on the motivations for the exercise, particular target audiences may influence the way the expectations are defined. Target audiences may include government agencies, the community of scholars, practitioners, students, grant agencies, and many others, as well as subsets of individuals within each of those broad categories. Knowing the target audience(s) is important because, ultimately, the school must be able to describe its research contributions in a language that the audience will understand. At the same time, target audiences should also be attuned to the school's mission; schools must be careful to discern occasions when external pressures seek to influence the school to engage in activities that do not align with its mission.

Key Questions

- How does the mission of the school (or the university with which it is affiliated) drive decision-making about the kind of impact the school desires from its research and scholarship activities?
- What are the target audiences for this impact? For communications about that impact?

2. Define expectations at the school (not the individual) level.

Recall that the focus of the exercise described in this document is the research dimension of the business school's mission. As alluded to earlier, although this aspect of the mission can only be achieved through the combined contributions of numerous individuals, the assessment described herein is not intended to determine if and to what degree individual researchers have contributed to the mission.

It was clear through the exploratory study that, for some schools, this broader focus is easier said than done. Several participating schools reflected on the tendency for discussions about assessing research output at the school level to drift toward debates about how to measure each individual faculty member's contributions. This risk appears to be greatest when the starting point for analysis is a list of every faculty member's intellectual contributions, which are then examined individually for alignment with expectations. The risk is lowest when the starting point is the statement of expectations, and then the intellectual contributions and activities that relate to those expectations (and only those) are considered.

With the latter approach, it is perfectly acceptable for a school to focus on research in particular fields or a combination of fields and, more importantly, to ignore others. To omit some research activities from assessment is not to say that those efforts do not have value; presumably all research activity should have some value for the individual who conducts it and the enhanced knowledge and/or reputation the individual receives as a result is, in turn, beneficial for the school. Evidence of "impact" toward the school's achievement of its research mission may not be necessary for an individual to maintain academic qualification, for example.

This, in other words, is a reiteration of the distinction between Standard 2, which focuses on the school and the research aspect of its mission:

The mission incorporates a focus on the production of quality intellectual contributions that advance knowledge of business and management theory, practice, and/or learning/pedagogy. The school's portfolio of intellectual contributions is consistent with the mission and programs offered.⁸

and Standard 10, which focuses on the qualifications of individual faculty members:

The faculty of the school has, and maintains, expertise to accomplish the mission, and to ensure this occurs, the school has clearly defined processes to evaluate individual faculty members' contributions to the school's mission.⁹

Note that Standard 10 does not call for processes to evaluate individual faculty members' contributions specifically to the *research aspect* of the mission; rather, it calls for their expertise to support all aspects of the mission, in accordance with the individual's other duties and responsibilities.

At the same time, a recurring theme in discussions among exploratory study participants was that incentive structures for engaging in research (e.g., promotion and tenure, scholarly reputation, etc.) are often tied to the individual. In some cases, the school's expectations will match tenure and promotion criteria; other schools may discover opportunities to better leverage, adapt, or complement the tenure and promotion policies in place to minimize conflicting incentives. Further discussion on this topic appears later in the section on Using and Communicating What Was Learned.

⁸ AACSB International, 2011, p. 19-20

⁹ AACSB International, 2011, p. 42

Case in Point: Define expectations at the school (not individual) level.

The QUT Business School at the Queensland University of Technology chose to focus its attention on five research themes in which the school had identified strengths. At the same time, having a clear definition of the school's overall research expectations in accordance with its mission also enabled the school to implement related faculty management policies:

The QUT Business School aims to actively encourage research conducted with industry partners, with a focus on five areas of excellence in which the business school has a "critical mass" of expertise: (1) the National Center for Econometric Research, (2) Australian Centre for Philanthropy and Non-Profit Studies, (3) Infrastructure Management, (4) the Entrepreneurship and Innovation Program, and (5) Services Innovation. In order to be designated as an area of excellence, the research area must demonstrate scalability and the potential for high impact outcomes at the industry and publication levels.

The school tracks the impact of its research activities on practice in part through the value of Australian Research Council linkage grants awarded (the "linkage" category corresponds to applied research with industry). Thus, the impact of Industry Collaborative Research is measured not just by the transfer of research to industry but also by the investment of industry in defining and developing research agendas. Faculty workload policies have been revised to increase incentives and rewards for high-quality, high-impact outputs. The policy also rewards the receipt of grant money (e.g., from industry) toward research.

Case in Point: Recognize the influence of individual-level incentives.

The School of Management at Binghamton University, State University of New York articulated its impact expectations as follows:

In the School of Management, the focus of the faculty's efforts is to engage in research that creates new knowledge and makes the faculty highly visible to a target audience (i.e., the academy, our primary stakeholder). The principal product forms are peer-reviewed research articles published in academic journals and presented at scholarly venues that explore theoretical and managerial issues of management. "Impact" is measured by the quantity of publications in the discipline journals, and success is differentiated by the journal quality and number of citations of our published work by other scholars. It is expected that the reputation, established by these impact measures, should lead to further recognition (and associated impact) in the form of invitations to join academic consortia and engage with the practice community through course-related community/industry projects.

Despite framing impact expectations at the school level, the school also acknowledged the link between the type of research being conducted, the teaching responsibilities, and the career stage of a faculty member, in what it termed the "Life-Cycle Model." Thus, aggregate expectations for research are closely aligned with faculty hiring, development, and deployment strategies, explained as follows:

The school's mission emphasizes discipline-based scholarship that can/should ultimately contribute to better classroom experiences and management practice. However, how we develop our junior faculty determines the nature of their contributions to scholarship and practice. For junior faculty (assistant professors), we put more emphasis on their (theoretical) research relative to their contribution to teaching or practice. At this growth and development stage, we expect the faculty to establish an academic reputation in their field of expertise. We expect that faculty members will achieve this reputation primarily by their publications in top-quality journals (top three in the field). We expect faculty to maintain high visibility in the academy, primarily through the presentations of their research in their area's major academic conferences and consortia. We do not require junior faculty to apply for sponsored funds for their research. To the extent possible, we have them teaching specialized bachelor's- and master's-level courses in which they can bring some of their research to the classroom. As a policy, they do not teach in the executive MBA programs, as the latter requires a focus on practice.

At the post-tenure (development and maturity) stage, we expect to see a broadening in a faculty member's contributions. We expect these faculty to take an active role in creating specialized PhD seminars in their area. We call upon a few (selected) faculty to take on executive teaching obligations that include supervising projects that have an impact on the organization's business practices. We expect faculty in the Leadership area to apply for sponsored grants through the Center for Leadership Studies (CLS) and to engage in cross-disciplinary and interdisciplinary research through collaborative relationships with faculty from other disciplines, including strategy, entrepreneurship, information systems, and bioengineering.

Key Questions

- What metrics, if any, does the school find appropriate to assess whether its research is having the intended impact?
- Are the school's approaches to measuring the impact of intellectual contributions oriented toward the aggregate school level, as intended, or are they focused on individual contributions?
- Do the school's promotion and tenure policies, or other incentive structures, inhibit or discourage pursuit of these expectations?

3. Engage faculty.

As mentioned previously, the exploratory study results suggest that the process of defining research expectations that align with the mission has the potential to bring greater clarity to the school's purpose and create a culture of cohesiveness among faculty members and staff. A key step toward achieving this outcome is to engage faculty members and other stakeholders in the process. Schools in the exploratory study suggested using the exercise as an opportunity to provoke discussion or, in the words of one participating school, to "create a discourse on quality." This process is an opportunity for discussion about the types of intellectual contributions that serve the school as a whole, not just the individual faculty members' careers or disciplines.

"The process of analyzing and evaluating the data as well as discussing the results within the faculty is ... regarded as valuable since it creates a conscience within the faculty, drawing a self-image and enabling a self-reflection."

The best approach to engaging faculty in defining expectations is likely to be one that aligns with a school's existing processes for faculty input and decision-making. Thus, approaches might involve input collected through committees, councils, or other formal structures. Additionally (or instead), efforts might involve widespread calls for and circulation of ideas, with feedback supported through online platforms or informal channels. Descriptions of two schools' processes for eliciting faculty members' input are provided as examples in the box found on the next page.

Furthermore, this engagement is important at every stage of the effort, from defining the expectations for research to identifying metrics and reporting frameworks to assessing results. As one school noted, "The process of analyzing and evaluating the data as well as discussing the results within the faculty is ... regarded as valuable since it creates a conscience within the faculty, drawing a self-image and enabling a self-reflection."

Case in Point: Engage faculty.

The College of Business and Economics at California State University, Northridge described its process of engaging faculty as follows:

CSUN started the exploratory study with a focus on our present mission and vision of the College. Faculty [members] were asked to isolate targets or outcomes specified or implied as impacts of our intellectual contributions in the present mission. Given the present mission and the specific targets and outcomes expressed or implied, faculty within each department were asked to consider, discuss, and attempt to reach consensus on two questions: (1) What is the impact we have on these targets? and (2) How would we measure this impact?

Each department chose its own platform for engaging faculty, which included vigorous email discussions, department faculty meetings, and surveys. Each department reported on targets isolated and impacts expected for each target and on the possible measures that could be used to track impact. Department reports were synthesized and presented at an all-college faculty meeting where cross-departmental consensus was reached about our key targets, our impacts on each target, and some possible measures to gauge each impact. This afforded the college the opportunity to establish a situation analysis of the intellectual contributions impacts we believed we were producing that were aligned with and supportive of the mission. This approach provided the benefit of producing a study outcome that could readily and immediately be used in strategic planning as an intellectual contributions impact benchmark for our subsequent planning period.

The Business School of Universitaet Mannheim described its process of faculty engagement as follows:

The Business School created a working group ... presided by the associate dean for research. The group represents six of the school's seven academic areas (Accounting and Taxation; Banking, Finance and Insurance; Economic and Business Education; Information Systems; Management; Marketing; and Operations Management) and different academic ranks (professors and research assistants) in the faculty. It conducted in-depth discussions on a variety of issues related to the pilot study and drew up a statement of impact expectations. In order to encourage a high level of faculty involvement, the faculty was informed about the pilot study from the outset, and all faculty members were invited to contribute and participate during each phase of the discussion process. Draft versions, papers, discussions, and the results of the working group were available to all faculty members on the university's online platform. The statement of impact expectations and the final report were presented and discussed in the Konvent, an informal committee that brings together all of the school's full professors. In this forum, the statement was discussed and elaborated. In order to gather input from the corporate world, the statement was presented to the Chairman of the Board of Trustees, Prof. Dr. Claus E. Heinrich (Board Member, SAP). The result was presented in and approved by the School Council, the main committee responsible for the school's research, teaching, and fundamental study-related issues and which is a regular meeting forum for the school's various stakeholders, such as professors, junior faculty members, employees, and students.

Key Questions

- Has the school engaged a cross-section of faculty, administrators, and other stakeholders in the development of impact expectations and, later, processes for assessment?
- What processes are in place to ensure that the appropriate internal stakeholders understand (and are invited to discuss) the relationship between the impact of research and the mission?

EXPLORING POSSIBLE MEASURES

For many schools in the exploratory study, the most challenging aspect was not defining expectations; rather, it was seeking to identify possible measures that would indicate whether or not expectations were being achieved. These efforts were often frustrated by disagreement about the validity and utility of easily accessible measures, difficulty actually measuring the dimensions thought to potentially be most revealing, and concerns about whether the value of the information obtained would justify the cost to obtain it. Other schools are likely to encounter similar challenges.

This section offers some guidance for exploring measures that, although likely to be imperfect, may bring the school closer to an understanding of whether expectations are being achieved. As mentioned in the last section, the goal is not to measure the value, alignment, and/or impact of every individual research contribution; rather, the goal is to assess the extent to which, on the whole, the school is supporting a research portfolio that aligns with the expectations articulated through the research dimension of its mission.

Two important themes run through the advice given in this section. First, because no two schools are identical in what they expect to achieve through research—especially if they execute the first objective of defining research expectations well—measurements across schools are likely to differ subtly, if not significantly. Overlap is to be expected and may be substantial among schools that view themselves as peers. However, even schools that are structurally similar are not likely to arrive at the same conclusions when defining research expectations at the school level. As discussed below, attempts to measure research outcomes could cause tensions between relevance and comparability.

Second, schools should think beyond pressures to measure and report research-related data in a specified way when doing so for internal purposes. These pressures come from a variety of organizations, including media rankings, governments, and accrediting bodies. Rankings are a channel to investing in reputation, and governments can be an important source of funding in achieving strategic objectives; thus, providing information in the form requested for these purposes is important. However, the purposes driving that reporting should be viewed as distinct from the purpose of the assessment described in this report. Reporting for accreditation purposes also is often expected in a form that serves the needs of the accrediting body—namely to ensure some level of objectivity and consistency across accreditation reviews. Yet AACSB frequently reminds schools that when their end goal is to achieve the mission and vision they have defined for themselves, and not the awarding of accreditation, *per se*, schools are more likely to be successful. Schools should not depend solely on the requests of others, but they should strive internally to develop their own, more relevant, portfolio of measures.

Regarding both themes, readers should note that this report is concerned with helping schools interested in a process of introspection related to research. This process can be done *only* by individuals at that school (perhaps with external input), and it can neither

replicate the process used at other schools nor depend on processes that were designed by other organizations for different purposes. The guidance that follows is intended to help schools develop a process that aligns with its own self-assessment and continuous improvement objectives.

1. Envision a collection of approaches and measures rather than a single metric.

The list of potential metrics that a school might use to assess achievement of research expectations is long. Appendix A contains a list of those considered by exploratory study participants, and surely there are many more, just as countless variations on any one of those metrics could be identified and applied. Efforts to reduce the set to a single measure, such as the total number of citations, are tempting. And while simplicity has many advantages, a single metric, or even a small number of metrics, likely will not provide all of the information a school is seeking about the range of outcomes it expects. According to experts in the field of assessing research impact, state-of-the-art approaches to assessing research impact employ a range of methods, including narratives and qualitative information as well as quantitative measures.

Key Questions

- Are we thinking broadly about the various approaches and measures that can be applied?
- Have we explored the literature on assessing research impact, and have we gathered information about the full range of approaches employed by schools?

2. Carefully assess the appropriateness, and feasibility, of any metric.

At the same time that seeking a single measure is unproductive, schools still must be discerning about whether any particular metric is relevant and cost-effective. No school has the time or resources to pursue each of the metrics listed in Appendix A, nor should it. Some metrics will be appropriate for certain schools but irrelevant to others. Several measures included in the list were proposed by schools that ultimately deemed them inappropriate, for various reasons, for the expectations they sought to measure.

A careful assessment of which measures are best aligned with expectations, as well as the cost of implementation and potential benefit of the information provided, is thus critical. In fact, several participating schools and peer review team members pointed out the potentially high cost of defining and beginning to collect data to support a focus on assessing whether research expectations have been met. As one school noted,

One of our contributions to the overall project on assessment of research impact might be to sound a note of caution about the need to carefully assess the costs and benefits of assessing research impact ... Because of the cost and complexity of fully assessing research impact, we reserve major assessments of research impact for major decision points in the faculty life cycle (e.g., promotion and tenure, appointment to an endowed position). At other points in the process (e.g., faculty annual reviews), we rely on more indirect and less costly measures of research impact.

Unfortunately, the quality of a measure and its accessibility are not always positively correlated. Finding appropriate, high-quality metrics to assess whether the school has met its expectations for research is difficult. When actual measures of impact are difficult to define, relying on less perfect measures may be necessary. For example, one school noted that presenting at the Academy of Management meeting is a measure, but a better measure would be to survey the audience for what they thought of the information presented. The difficulty, according to the school, is “not in finding possible measures but in exploring reliable and manageable measures.” Especially difficult, as noted by several participating schools, is measuring impact when the intention is to influence practice.

“One of our contributions to the overall project on assessment of research impact might be to sound a note of caution about the need to carefully assess the costs and benefits of assessing research impact.”

Additionally, it would be expected that seemingly similar metrics might be defined and applied differently at schools with diverse missions. Metrics related to publication in peer-reviewed journals might define acceptable quality thresholds, such as the journals’ acceptance rates or other measures of journal quality. One school’s measures of its research citations in media outlets might, for example, place greater value on internationally syndicated newspapers than on local business journals. Other schools whose missions focus more narrowly on local economic development might assess how well their research is reaching members of the local business community who may be less likely to follow international media outlets.

Case in Point: Carefully assess the appropriateness, and feasibility, of any metric.

The Schroeder Family School of Business Administration at the University of Evansville identified numerous metrics for basic research, but it also identified two others that were uniquely oriented to the school's emphasis on the classroom and student learning. The school's descriptions of these measures, below, reflect the struggle shared by other schools in the exploratory study with regard to the imperfect nature of any metric:

Mentorship of undergraduate research: "One of the most effective impacts of faculty research is student participation in undergraduate research under faculty supervision. The suitable metric here, which satisfies the criterion of uniformity across disciplines and consistency over time, is the count of papers that culminate in presentation at formal and recognized conferences for undergraduate research. It is anticipated that the mentored projects would be consistent in content or methods of analysis with the faculty member's area(s) of research. This dimension of impact is particularly important to institutions whose missions are heavily teaching oriented."

Direct use in the classroom of other scholars: "Throughout higher education, countless course syllabi contain required or optional reading lists consisting of journal articles by influential researchers in the courses' respective disciplines. This is a clear measure of impact, although it is not likely to be as readily accessible as [other measures, such as citation counts, indicators of journal quality, article download counts, and secondary support citations]."

Key Questions

- Are our measures appropriately aligned with our school's unique mission and research expectations?
- Is our plan feasible and sustainable without *unnecessary* additional cost?
- If our school were to fully implement the assessment process we have outlined, would we have sufficient resources to cover the cost of implementation?

3. Avoid creating artificial constraints.

Schools are encouraged to think outside the box when considering what, and how, to measure. While the maintenance of accreditation process encourages reporting intellectual contributions by type (e.g., discipline-based, applied, and pedagogical) and output form (e.g., peer-reviewed journals, research monographs, books, chapters, etc.), the exploratory study motivated some schools to report aggregate data by topic (e.g., centers of excellence relating to aspects of a school's mission or strategic plan). These schools reported increased engagement by faculty who were exposed to the relevance of their contributions when looking at them from new perspectives.

Timeframes, such as “five years,” may be another artificial constraint. As one school noted, “too much emphasis on demonstrating impact in the short term could have the unintended consequence of reducing the quantity and motivation to do some of the most important research where true impact may not become visible for years or decades.” The full range of value or impact does not occur in a set time horizon. Some schools may find it convenient to report in timeframes that coincide with regular strategic planning or accreditation review cycles; if so, the goal should be to show an incremental increase in impact in each timeframe studied.

“Too much emphasis on demonstrating impact in the short term could have the unintended consequence of reducing the quantity and motivation to do some of the most important research where true impact may not become visible for years or decades.”

Seeking the input of external stakeholders, particularly those to whom research outcomes are directed, is one way to minimize artificial constraints. Such individuals may offer new perspectives about how to measure the value of research to specific target audiences, or about alternate types of research output that should be monitored.

Case in Point: Avoid creating artificial constraints.

The Haub School of Business at St. Joseph’s University suggested that limiting the scope of assessment to only peer-reviewed journal publications would be an artificial constraint, as would applying the same outcome expectations to all research topics and types.

As an example, the school’s report notes that the mission statement for the Haub School of Business identifies “innovative niche programs” as a core value, explained thus:

From its inception, the HSB has been entrepreneurial in its approach to targeting and serving the needs of key industries and strategic niches. We seek to continue our creative focus on industry segments such as food, pharmaceuticals, financial services and public accounting ... [This aspect of the mission] may best be met with magazine or newspaper articles that educate and inform those key industries’ managers as well as other important stakeholders of those industries. Additionally, such contributions may serve to raise the profile and reputation of the HSB and potentially generate greater opportunities for HSB graduates.

(Continuation)

The report goes on to note that expanding the potential scope of channels through which research may have impact does not necessarily equate lowering standards; rather, it means closely identifying those channels that are appropriate to the particular area of focus:

Even though a wide range of contributions can meet the mission of the school, it may be appropriate for the school to encourage a higher quality, or stature, of the outlets in which the contributions appear. Over time, we can work to improve the academic reputation of the HSB among our peer business schools by gradually increasing the acceptable outlet level for our intellectual contributions. Also, standards of expectations may vary considerably across departments within the HSB. For example, the target publications for a department that is closely allied with a key industry, such as Food Marketing, may best be served with a very different set of outlets for their intellectual contributions than for another department, such as Finance, that may not ally itself with a key or niche industry but [instead] targets business in general or even the pursuit of basic research over applied.

Key Questions

- Are our measures or processes inhibited by artificial constraints? What new ways of thinking about/organizing research output and related impacts might we consider?
- Have we considered the dimensions that related stakeholder groups, such as practitioners, students, funding sources, etc., might value? Have we asked them to contribute ideas?

4. Accept that some of the more interesting insights do not lend themselves to numbers and tables.

The tendency to gravitate toward quantitative metrics and tabular presentations is strong, perhaps especially so among business academics. Governments, rankings, and accrediting bodies often exacerbate this tendency by favoring quantitative approaches, requesting numerical data, and prescribing formats for tabular information. Often their main objective for doing so is comparability across institutions. When the primary purpose of describing research outcomes and impacts is more internal—to assess and improve over time—thinking beyond the reporting expectations of other organizations is essential.

Participants in the exploratory study were encouraged to think broadly about potential metrics. Some schools envisioned a quantitative approach involving tables and calculations. Others chose an approach using structured tables containing descriptive information. Still others chose a non-structured approach of generally describing their schools' recent and ongoing research activities, including specific anecdotes or "cases" of noteworthy examples.

For many schools, simply being better prepared to "tell the story" about the value created through their investments in research is a sufficient outcome of this exercise. This newfound ability may be as simple as articulating how a series of separate outputs, activities, or initiatives (described anecdotally) come together to create value for intended audiences. Doing so does not necessarily require pages of tables, charts, and quantitative analysis. Compare, for example, the richness of the descriptions in the box below with how those same outputs and activities might have been represented quantitatively.

A related point is that research does not have to translate into economic value to have impact in various communities. Business school research can have a profound impact on policy and culture that is difficult, if not impossible, to quantify. In these cases, narratives may be the only way to effectively capture and understand such impact. The ability to describe output/impacts in written, non-tabular form also is especially helpful in positioning the school to *use* what is learned with external stakeholder groups. In some cases, qualitative descriptions are likely to be more meaningful than tables or numbers, which may be at greater risk of misinterpretation.

Case in Point: Accept that some insights do not lend themselves to numbers and tables.

The QUT Business School at the Queensland University of Technology augmented its report to the peer review team with a series of brief anecdotes showcasing the impact of different types of research initiatives. Excerpts of some anecdotes appear below:

Impact on Teaching and Learning Practice

In 2009 QUT Business School academics received \$445,000 over three years in Australian Research Council funding plus \$300,000 in industry funding to conduct research into the contribution of project leader behaviours to processes and outcomes in large scale projects. The project focuses on achieving better project processes and leadership practice, especially in large-scale, complicated projects, in order to improve project success (as viewed by multiple stakeholders) and the performance, health and wellbeing of staff. The focus is on Australian defence acquisition projects but the research will have implications for international practice. This project will provide a major contribution to Australian defence capability by identifying how project leaders can improve project operations and deliver successful innovative acquisition products on time and budget. The outcomes of this project are directly related to, and will be incorporated in, the Executive Masters in Complex Project Management. In this way, the resultant knowledge will be passed on to leaders of large complex projects to better equip them to deal with complexity and unfolding technology.

(Continuation)

Impact on Practice

The national and international reputation of the school's work in the area of philanthropy and non-profit governance has been established through the major contributions of the Australian Centre for Philanthropy and Nonprofit Studies (ACPNS). The breadth of the centre's work is extensive, with major projects, study programs and involvement in many areas of philanthropy and nonprofit service.

The Standard Chart of Accounts for non-profit organisations developed through the centre has received national recognition within Australia, and has been adopted as the national standard within Australia by the Council of Australian Governments. It is now also being considered for adoption within New Zealand and Canada. Creation of the Chart of Accounts solved a national problem for government and community organisations having to account for the use of public money and will create a new national body of practice ...

Professor Myles McGregor-Lowndes, Director of ACPNS was invited at the end of 2009 to continue to sit on the Federal Government's Board of Taxation Advisory panel, in recognition of his work in and contribution to the body of knowledge for the philanthropic and non-profit sector.

Impact on the Scholarly Community

Professor Per Davidsson was winner of the Grief Impact Award 2009, Academy of Management for his 2003 Journal of Business Venturing paper: 'The role of social and human capital among nascent entrepreneurs.' The annual award recognises the entrepreneurship paper that appeared in the top-tier management and entrepreneurship journal six years ago and received the highest citations (based on Social Science Citations Index) in the five years following publication.

Key Questions

- Considering our main expectations for the impact of intellectual contributions, can or should any outcomes be conveyed through qualitative, rather than quantitative, reporting?
- How can qualitative descriptions supplement or complement compilations of data in tabular form?

5. Consider the balance between customization and comparability.

Among schools in the exploratory study, a clear tension existed between the desire to benchmark against other institutions and the desire to develop measures that are unique to the school's own areas of focus and intended research impact. The best approach may be a combination of both, with different balances based on the objectives of the assessment, the target audience, and the expectations being measured.

“As we move from relative to absolute measures, there is a greater risk of self-aggrandizement and promotion influencing the outcome.”

Each approach has both pros and cons. “As we move from relative to absolute measures, there is a greater risk of self-aggrandizement or self-promotion influencing how those measures are interpreted,” noted one exploratory study participant. Other schools in the study also expressed concerns about the subjective nature of some measures. At the same time, schools that focus on research outputs that are particularly unique to their missions may discover that finding comparable outputs at other schools is difficult if not impossible. As noted before, slight differences in the ways even peer schools might define seemingly similar measures for this exercise might render comparisons impossible or, at best, potentially misleading.

A distinction must also be made among various objectives for benchmarking. Comparable quantitative data help provide context to data and motivate improvement, but this type of data provides little information about the practices leading to high performance. Narratives and qualitative information will often have more value when the primary objective is reflection and learning from peer institutions.

Case in Point: Consider the balance between customization and comparability.

The University of Alberta School of Business, cautioning, “as we move from relative to absolute measures, there is a greater risk of self-aggrandizement and self-promotion influencing the outcome,” focused on metrics that would enable benchmarking against other similar business schools.

The school suggested three metrics that would allow comparisons of the school’s performance against other research-oriented schools: editorial board membership of an elite list of journals, citation impact, and recognitions/awards (e.g., Best Paper awards, etc.). For example, the school compares the editorial board membership of its faculty against that of schools in its “aspirant group” and compares the aggregate citations of its faculty’s research in selected journals against the *average* citation of all papers in the same journals for each year.

At the same time, underlying this focus on comparable metrics was recognition that certain topics particularly important to the school’s local community also offer opportunities for research with a broader reach. For example, the Alberta Business School brand is closely connected to topics such as energy, family business, and technology transfer/commercialization, for each of which the school has well-established research centers. Faculty in various disciplines are encouraged to pursue research agendas that contribute to these interdisciplinary areas and also lead to journal publications that receive broader recognition within the global academic community.

Together, the combination of efforts is intended to encourage alignment with the mission and facilitate benchmarking against peer and “aspirant” institutions while at the same time enabling the school to link locally and project globally.

The School of Business Administration at the Loyola University Chicago developed a rubric that incorporated both custom and comparable measures. Assessing peer-reviewed scholarly journal publications, books, and external grants for the most recent five-year period, the school first sought to confirm that the distribution of intellectual contributions across the purposes of advancing theory, practice, or teaching aligned with the school’s scholarly orientation.

The school was also interested in learning the extent to which such intellectual contributions aligned with the school’s mission and the goals of its strategic plan, as supported by its centers of excellence. Accordingly, three impact areas were identified: social justice and responsibility, global understanding of business, and innovation and entrepreneurship. Again looking at the same set of intellectual contributions, the school measured both the extent to which its research output aligned with these areas and the extent to which that output was representative of a cross-section of faculty members.

A third dimension, which consisted of compiling citation data, was envisioned to enable the school to also compare output objectively with that of peer institutions.

Key Questions

- Are our research expectations defined in a way that requires benchmarking (e.g., using language such as “the best of,” “one of the top,” “comparable to,” etc.)?
- How important is it that we are able to benchmark against other schools? Against ourselves over time?
- What other schools have research expectations similar to ours? In what ways do they assess achievement of those expectations?

6. Confirm and prioritize approaches.

Before moving forward, it is worth reflecting on the approaches chosen and confirming that the potential to learn more about whether the school is achieving its research expectations, or the potential to better communicate the value of investments in research, outweighs the costs of using resources to explore measures. An iterative process may help guard against doing too much, too quickly.

Some schools may find that they learn quite a bit about themselves in the *process* of defining expectations and thinking through potential measures, and end the exercise without intending to pursue any (or many) additional measurements or reporting beyond what is being done already. Others may see opportunities to incorporate more formal reporting of data that is already being collected to aid in communication about the impact of various school-supported research initiatives. Still others may identify new opportunities to better measure, quantitatively or qualitatively, the full reach and value of the research they are producing.

Key Questions

- Are the measures identified likely to yield information that is useful for continuous improvement at the school?
- If multiple measures are chosen, will the combination and weights of these measures provide the appropriate information to assess the intended impact?
- What opportunities do those measures offer the school for better understanding the outcomes of investment in the production/dissemination of intellectual contributions?

USING AND COMMUNICATING WHAT WAS LEARNED

The processes of defining research expectations and of exploring (and possibly implementing) a means of measuring or reporting achievement, as described in earlier sections, are both likely to be revealing. They may cause the school to think about research (or an aspect of research) in a new way, reveal underemphasized value, suggest misaligned priorities, or identify opportunities to better connect the school's strategic planning to its research expectations. For many schools, the insights from such an exercise will be useful for both internal and external purposes.

As noted in the section on setting expectations for the exercise, schools in the exploratory study stressed the reflective value of the study, particularly its potential contributions to ongoing self-study and continuous improvement processes. Strategic planning and benchmarking objectives can both be informed by a stronger understanding of research priorities, strengths, and impact (whether that impact is realized or potential). For this reason, research-related activities should not be viewed in isolation of other activities such as teaching and outreach; both should be evaluated for possibilities to create new research opportunities or to communicate about the research being undertaken.

Schools also cannot view this exercise in isolation from faculty systems. Individual faculty member expectations and incentives are likely to impact the aggregate output. This connection has implications for strategies related to the hiring, deployment, development, and management of faculty resources. Even the most iron-willed advocate of changes in these systems and processes is likely to benefit from evidence to justify the appropriateness of a proposed shift. This exercise may help reveal realities about the school's mission and related objectives that will enable the school to better align resource allocation, incentive systems, and even promotion and tenure processes with the teaching, research, and service expectations inherent in the school's mission.

Equally important are the potential uses for insights from the study among external stakeholders. Research impact is clearly about more than just discovery. Much like innovation is more than just invention, great research without effective dissemination to the right audiences is likely to fall short of its potential impact. In fact, several schools participating in the exploratory study noted that they discovered new opportunities to share research findings with stakeholder groups who might benefit.

Additionally, the opportunities are great for schools to address a critical need noted in the introduction of this report—that of better articulating the value that investments in scholarship have to their education of students and service to broader communities. When the connection between research findings and those expected to benefit is ill-defined, poorly

articulated, or ignored, questions over the value of using tuition dollars and public funding to support research should be expected to arise. Both students and the general public need concrete examples of how schools' investments in scholarship enhance educational and service activities; an exercise such as the one outlined in this report can help prepare schools to articulate this connection.

This section covers insights from the exploratory study related to possible actions that might arise from a process of exploring research expectations and the extent to which they are being achieved.

1. Avoid viewing school-level performance related to intellectual contributions in isolation from teaching and outreach activities.

Earlier sections emphasized the importance of aligning expectations with the mission. However, schools also must not focus so much on the mission that they ignore the role of strategy. Schools with similar missions may go about achieving them in very different ways. The mission guides articulation of research expectations, but knowing what those expectations are should then inform development of the institution's strategic plan. One participating school reported, "The insight afforded by the study carried into the planning processes, with research impact considered at a more enhanced depth than would have otherwise occurred ... This understanding allowed our planning in general to be more deliberate in building improvements where our impact is strongest and best aligned."

"The insight afforded by the study carried into the planning processes, with research impact considered at a more enhanced depth than would have otherwise occurred ... This understanding allowed our planning in general to be more deliberate in building improvements where our impact is strongest and best aligned."

The experience of the study furthermore reminds us that various business school activities interact in deep and meaningful ways; they cannot be viewed in isolation. We should not ignore, for example, that the primary way in which research influences practice is through teaching and outreach. As James Walsh said in his 2010 Academy of Management Presidential address, "we come face to face with our relevance every day in our classrooms."¹⁰ Teaching also creates opportunities for new research ideas and to collect data about the influence of scholarship. According to one school's report, "investments in innovative teaching can actually beneficially impact research activities for faculty ... [Teaching programs can] give faculty valuable exposure to practitioners, resulting in fruitful relationships."

Similar connections were drawn for outreach activities. Several schools, for example, did not initially explore the role of "research centers" or "centers of excellence," which often combine research expertise and teaching with outreach activities, and create opportunities to track research influence in important areas.

¹⁰ Walsh, James, 2011, p. 224

Case in Point: Consider the relationship to teaching and outreach activities.

The Mason School of Business at the College of William and Mary recently instituted a series of modules into its MBA program designed to facilitate closer connections and meaningful interactions between students, faculty, and business executives. As described below, the school saw a connection between its efforts to enhance the learning experience for students and the opportunities to enhance the research activities of faculty, as described in the below excerpt from the School's report:

One of our teaching innovations in our MBA Program is our Career Acceleration Modules (CAMs). These are immersion course modules that team faculty and executives with each other and with students to 'bring business into the business school' for our students in key career interest areas. As part of the CAM experience, we send the faculty and students off campus to visit companies and bring outside speakers to the classroom. A visit by a Financial Regulatory Authority (FINRA) lawyer to our Financial Markets CAM introduced our faculty members to regulatory programs that assisted an ongoing faculty research project. The resulting paper won the Best Paper Award at the recent meetings of the Western Finance Association and is currently in press with the *Journal of Financial Economics*. This study has been promoted by the FINRA on its website. Moreover, our faculty's involvement in that project has led FINRA to invite a proposal by our faculty to help design additional market transparency initiatives. These are examples of research that influences or impacts policymakers. Furthermore, a visit by our Finance CAM to the Federal Home Loan Bank's Office of Finance led the FHLB to provide proprietary data to our faculty to support analysis of its debt auctions. The analysis in the resulting research paper can now be used by the Office of Finance to help quantify the funding rate impacts of increasing the size of its debt auctions. It is hard to imagine a more robust measure of prospective impact.

Key Questions

- What specific activities (centers, programs, etc.) are specifically designed to create intersections between research and teaching or outreach activities?
- Do opportunities exist to be more deliberate with strategic planning and/or resource allocation in order to maximize achievement of research expectations?

2. Consider implications for faculty systems, including how individuals are evaluated and rewarded.

A recurring theme in the exploratory study was that schools grappled with the implications of faculty systems on the achievement of research expectations and, conversely, the implications of research expectations on whether and how systems that evaluate and reward faculty might be modified. One participating school, for example, noted that some of its faculty members “raised the issue of academic freedom in pursuing research agendas not linked to the [school’s] mission-related goals.” In fact, several schools noted that the will and ability to better align faculty research activities with the mission and strategic plan is constrained by various factors, including the following:

- limited mechanisms to influence the faculty research agenda
- misalignment of individual incentives (e.g., what is expected by the academy for individual career development and/or scholarly reputation) and business school impact intentions
- entrenched culture, routines and administrative structures
- national research assessments and other frameworks for financial resource allocation

At the same time, the schools involved recognized that research expectations cannot be achieved in isolation from attention to strategies guiding the hiring, deployment, development, and management of both faculty and staff members. Schools approached the issue with varying levels of formality. One, for example, noted that “any attempt to determine impact measures must be linked to HR/performance reviews,” while others saw promotion and tenure policies as serving a distinct purpose that did not align with the objectives of the research assessment. In the latter cases, schools explored alternate means of incentivizing efforts in support of the defined research expectations, such as offering opportunities for course release (or alternatively, for participation in executive education, graduate courses, or summer teaching), as well as supplemental funding and increased recognition.

Key Questions

- Has the school considered how investment of human and financial capital will influence (or be influenced by) the extent to which expectations are being achieved?
- How well do faculty systems align with research expectations? Do they encourage or inhibit the type of overall research impact the school aims to achieve?

3. Communicate findings effectively to enhance impact.

Just as innovation is more than invention, research impact requires more than just the process of discovery or an initial output of research findings. In fact, several schools in the exploratory study reported that the exercise revealed numerous research projects likely to have visible and, in some cases, measurable impact if they were communicated more broadly.

This discovery reinforces the need for schools to think strategically about the deployment of support staff—whether administrative support within research or outreach centers, media relations or marketing/communications staff, or others—in ways that enhance the potential for research to reach those it is intended to serve. This is particularly true for practice-oriented scholarship and important for ensuring the scalability of pedagogical research, but also relevant to basic scholarship. As the Impact of Research Task Force observed in its 2008 report,

[i]f 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 not 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.¹¹

In addition to practicing managers, students also need to be exposed, appropriately, to research projects and conclusions, as well as their subsequent applications. Doing so reinforces that their education is grounded in current, cutting edge efforts to advance knowledge of business and management theory, practice, and/or learning/pedagogy. And an appreciation for the role of rigorous and relevant research within business schools is one they are likely to carry with them as they pursue their careers as practicing managers.

The experiences of schools in the exploratory study further suggest that schools not isolate research activities among a core group of faculty members, but rather that they should create an “ecosystem” of sorts through which faculty, staff, students, and administrators play different roles in the creation, translation, and dissemination of research findings. Such an approach enables individuals to focus on areas in which they have particular interest and/or expertise. They also can focus on existing connections with various stakeholder groups—academic, practitioner, student, and subgroups thereof—in order to cultivate bilateral channels of communication that can result in better alignment between the needs of those groups and the research questions being explored. The school, then, provides the infrastructure and processes that tie these different roles together in a complementary way.

11 AACSB International, 2008, p. 19

Key Questions

- What opportunities exist to better communicate research findings to target audiences that might benefit from them?
- Who are the various individuals that might comprise an “ecosystem” of research creation, translation, and dissemination, and what roles do they play?

4. Tell your story.

Schools in the study also identified instances of research impact that were not being communicated effectively to university stakeholders, including funding agencies and accrediting bodies. The exercise was thus seen as fundamental in enabling, and encouraging, a better understanding by the school’s stakeholders of its mission and its investments in research. As one school noted, “We see an opportunity to provide clarity in communicating and understanding this critical activity (impactful research) along with our academic programs ... The impact of our research and the impact of our academic programs combine to establish who we are to our external constituencies.”

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In fact, AACSB-accredited schools’ engagement in research and scholarship is a key differentiator from many non-accredited schools. The research they support is not just a part of their mission, but it is also a part of their identity and brand, and a major contributor to quality education. Even among the set of AACSB-accredited schools, communication about a school’s unique research objectives and outcomes is a way to distinguish the school in the minds of potential students as well as community or industry partners, and a way to justify the allocation of resources to support the research aspect of its mission.

Ending this list of guidance and insights with two points that emphasize the importance of external communication is intended to serve dual purposes. First, if one particular point should linger in the reader’s mind after reviewing these pages, it is the need to question whether one’s school is doing all it can—and should—to communicate about the importance of its investments in research to external stakeholders. Second, the concluding emphasis on external communication reinforces a key reason that engaging in an exercise to closely examine research expectations and achievement of those expectations is so important. As noted in the introduction, when the value proposition of the research the school invests in is unclear, students, legislators, and the broader community can easily argue for reduced investments in that activity as a means to cut tuition costs or public financial support.

For decades, AACSB-accredited schools have been reaffirming their belief in, and commitment to, scholarship as a core activity of collegiate business schools and as the means for sustaining the discipline and the effective practice of management. It is time they put the mechanisms in place to show why.

Key Questions

- What opportunities exist to more effectively communicate about the school's overall achievement of research expectations (e.g., to university administrators, potential funding sources, government agencies, accrediting bodies, etc.)?

APPENDIX A: INDICATORS CONSIDERED BY EXPLORATORY STUDY PARTICIPANTS

The following indicators were identified by schools that participated in the exploratory study as potential indicators of research impact and/or alignment with expectations. The full list provided below is meant neither to be comprehensive (surely, schools will identify others not listed here, or find new variations) nor to be an endorsement of any particular indicator. As emphasized within this report, schools must be discerning about whether any particular metric is relevant and cost-effective. Several of the measures included in the list below, for example, were identified by an exploratory study school as a potential measure, but, for various reasons, not one it would choose to utilize.

PRACTICE/COMMUNITY

- media citations (number, distribution)
- requests from the practice community for faculty expertise (e.g., consulting projects, broadcast forums, researcher-practitioner meetings)
- publications in practitioner journals or other venues aimed directly at improving management expertise and application
- consulting reports
- research income from various types of industry and community collaborative schemes
- case studies of research leading to solutions to business problems or of research being adopted through new practices by industry and community partners
- presentations and workshops
- invitations to serve as experts on policy formulation panels, witnesses at legislative hearings, special interest groups/roundtables, etc.
- tools/methods developed for companies
- membership on boards of directors of corporate and non-profit organizations

ACADEMIC

- overall number of peer-reviewed publications (in designated journals, e.g. Top 3, 10, etc.)
- citation counts (e.g., SSCI/ISI, Google Scholar)
- download counts (e.g., electronic journals)
- faculty activities as editors, associate editors, or as editorial board members (for designated journals), reviews for journals
- elections and appointments to key positions in professional associations
- recognitions/awards (e.g., “Best Paper,” etc.) granted by university or scholarly societies
- invitations to participate in research conference, scholarly programs, and/or national and regional research forums
- inclusion of academic work as part of syllabi for courses by other professors
- use of papers in doctoral seminars
- grants from major national and international agencies, (e.g., NSF and NIH); third-party funded research projects, and funds obtained
- patents
- appointments as visiting professors in other schools (or a designated set of schools)

DOCTORAL EDUCATION

- hiring/placement of PhD students, junior faculty, post-doctoral research assistants
- publications of PhD program students and graduates
- invited conference attendance, awards/nominations for doctoral students/graduates
- research fellowships awarded to doctoral students/graduates
- funding award levels for students of higher degree research training
- case studies of knowledge transfer to industry and impact on corporate or community practice through higher degree research training activities
- research output of junior faculty members (post-doctoral junior professors and assistant professors as well as doctoral level research assistants and PhD students), because they are often influenced by a mentor/supervisor

TEACHING

- grants for research that influences teaching practice
- case studies of research leading to the adoption of new teaching and learning practices
- textbooks, teaching manuals, and publications that focus on research methods and teaching: number, editions, sales volume, use in teaching
- research-based learning (e.g., in projects with companies, institutions, and non-profit organizations)
- instructional software (number developed, number of users)
- case study development (number developed, number of users)

UNDERGRADUATE EDUCATION

- mentorship of undergraduate research, by counting the papers produced by undergraduate students (under faculty supervision) that culminate in presentation at formal and recognized conferences for undergraduate research
- documented improvements in learning outcomes that result from teaching innovation (from learning and pedagogical research)

EXECUTIVE EDUCATION

- involvement of research-active faculty in executive education

RESEARCH CENTERS

- invitations by governmental agencies or other organizations for center representatives to serve on policy making bodies
- continued funding (e.g., number of donors, scale of donations)
- number of hits (e.g., tracked by Google Analytics) on the research center website
- attendees (representing academics, practitioners, policymakers, etc.) at center-sponsored conferences
- web hits

MISSION ALIGNMENT

- alignment of intellectual contributions with themes valued by the school's mission (e.g., "social justice," "global," "innovation")
- percentage of intellectual contributions (at college level and/or department level) that align with one or more "mission-related categories;" or, percentage of faculty with one or more intellectual contributions that align with one or more categories

APPENDIX B: OVERVIEW OF KEY QUESTIONS

Defining Research Expectations

1. Align research expectations with the school's mission (i.e., be authentic).

- How does the mission of the school (or the university with which it is affiliated) drive decision-making about the kind of impact the school desires from its research and scholarship activities?
- What are the target audiences for this impact? For communications about that impact?

2. Define expectations at the school (not the individual) level.

- What metrics, if any, does the school find appropriate to assess whether its research is having the intended impact?
- Are the school's approaches to measuring the impact of intellectual contributions oriented toward the aggregate school level, as intended, or are they focused on individual contributions?
- Do the school's promotion and tenure policies, or other incentive structures, inhibit or discourage pursuit of these expectations?

3. Engage faculty.

- Has the school engaged a cross-section of faculty, administrators, and other stakeholders in the development of impact expectations and, later, processes for assessment?
- What processes are in place to ensure that the appropriate internal stakeholders understand (and are invited to discuss) the relationship between the impact of research and the mission?

Exploring Possible Measures

1. Envision a collection of approaches and measures rather than a single metric.

- Are we thinking broadly about the various approaches and measures that can be applied?
- Have we explored the literature on assessing research impact, and have we gathered information about the full range of approaches employed by schools?

2. Carefully assess the appropriateness, and feasibility, of any metric.

- Are our measures appropriately aligned with our school's unique mission and research expectations?
- Is our plan feasible and sustainable without *unnecessary* additional cost?
- If our school were to fully implement the assessment process we have outlined, would we have sufficient resources to cover the cost of implementation?

3. Avoid creating artificial constraints.

- Are our measures or processes inhibited by artificial constraints? What new ways of thinking about/organizing research output and related impacts might we consider?
- Have we considered the dimensions that related stakeholder groups, such as practitioners, students, funding sources, etc., might value? Have we asked them to contribute ideas?

4. Accept that some of the more interesting insights do not lend themselves to numbers and tables.

- Considering our main expectations for the impact of intellectual contributions, can or should any outcomes be conveyed through qualitative, rather than quantitative, reporting?
- How can qualitative descriptions supplement or complement compilations of data in tabular form?

5. Consider the balance between customization and comparability.

- Are our research expectations defined in a way that requires benchmarking (e.g., using language such as “the best of,” “one of the top,” “comparable to,” etc.)?
- How important is it that we are able to benchmark against other schools? Against ourselves over time?
- What other schools have research expectations similar to ours? In what ways do they assess achievement of those expectations?

6. Confirm and prioritize approaches.

- Are the measures identified likely to yield information that is useful for continuous improvement at the school?

- If multiple measures are chosen, will the combination and weights of these measures provide the appropriate information to assess the intended impact?
- What opportunities do those measures offer the school for better understanding the outcomes of investment in the production/dissemination of intellectual contributions?

Using and Communicating What Was Learned

1. Avoid viewing school-level performance related to intellectual contributions in isolation from teaching and outreach activities.

- What specific activities (centers, programs, etc.) are specifically designed to create intersections between research and teaching or outreach activities?
- Do opportunities exist to be more deliberate with strategic planning and/or resource allocation in order to maximize achievement of research expectations?

2. Consider implications for faculty systems, including how individuals are evaluated and rewarded.

- Has the school considered how investment of human and financial capital will influence (or be influenced by) the extent to which expectations are being achieved?
- How well do faculty systems align with research expectations? Do they encourage or inhibit the type of overall research impact the school aims to achieve?

3. Communicate findings effectively to enhance impact.

- What opportunities exist to better communicate research findings to target audiences that might benefit from them?
- Who are the various individuals that might comprise an “ecosystem” of research creation, translation, and dissemination, and what roles do they play?

4. Tell your story.

- What opportunities exist to more effectively communicate about the school’s overall achievement of research expectations (e.g., to university administrators, potential funding sources, government agencies, accrediting bodies, etc.)?

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