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Investigating the participation of business librarians in academic program reviews using corpus-based methods

Q2 Lynne Bowker 

School of Information Studies/School of Translation and Interpretation, University of Ottawa, Ottawa, Ontario, Canada

ABSTRACT

Prior research into the role of business librarians in academic program reviews has relied on surveys and interviews, revealing that librarians perceive that they are marginalized in the review process. Using a collection of program review documentation produced for the reviews of nine graduate programs offered at a Canadian business school, this study employs corpus-based techniques to obtain direct measures of librarian involvement. The findings provide objective confirmation that business librarians are not well integrated into program reviews overall, and that their contribution to the reviews of professional programs is even more limited than their contribution to the reviews of research-oriented programs. Based on best practices and missed opportunities observed as part of this study, seven strategies are suggested for integrating business librarians more fully in the program review process for the benefit of all program stakeholders.

KEYWORDS

Academic libraries; academic program reviews; business librarians; corpus-based methods; cyclical program reviews; institutional quality assurance process; librarian–faculty relations; new program reviews; professional business programs; research-oriented business programs

Introduction

Over the past decade, researchers in Library and Information Science (LIS) have repeatedly called attention to the fact that surveys constitute the principal research tool in LIS research, and they have advocated for the use of a wider range of research methods (e.g., Gauchi Risso, 2016; Hider & Pymm, 2008; Turcios, Agarwal, & Watkins, 2014). While surveys can offer valuable insights, they mainly provide indirect measures by capturing the perceptions of the respondents. LIS researchers can benefit from employing other approaches to complement survey-based studies. As explained by Bowker (2018), corpus linguistics is a field that has spawned a range of techniques that have the potential to be applied in LIS research. In this article, we put some corpus-based techniques into practice in a pilot study that investigates the contribution of academic business librarians to the

CONTACT Lynne Bowker  lbowker@uottawa.ca  School of Information Studies/School of Translation and Interpretation, University of Ottawa, 70 Laurier Avenue East, Hamelin Hall, Room 401, Ottawa, ON K1N 6N4, Canada.

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44 program review process of new and existing graduate programs at a busi-
45 ness school in Canada.

46 Academic program review is a key component of quality assurance in
47 post-secondary institutions; however, academic business librarians have
48 reported that their contributions to the review process are often limited,
49 and they suggest that faculty practices and attitudes are significant barriers
50 to their involvement. To date, investigations pertaining to business librarians'
51 participation in program reviews have been largely based on librarians'
52 perceptions obtained through surveys or interviews (e.g., White, 1999;
53 Wu & Senior, 2016). The present study aims to validate or refute these per-
54 ceptions by employing an empirical corpus-based approach to investigate
55 business librarians' contributions to graduate program reviews. In addition,
56 it seeks to observe whether the role of the business librarian is viewed
57 differently for professional programs (e.g., MBA, MHA) as compared to
58 research-oriented programs (e.g., MSc in Management, PhD in E-Business).
59 This will be accomplished by analyzing a corpus of documents that are
60 created as part of the review processes for new and existing graduate
61 programs. The investigation takes the form of a pilot study that focuses on
62 the set of review documents that were produced during the five-year period
63 from 2013 to 2017 as part of the program review process for four profes-
64 sional graduate programs and five research-oriented graduate programs
65 offered by the Telfer School of Management at the University of Ottawa
66 in Canada.

67 This study is divided into six main sections. We begin with a short
68 description of the institutional quality assurance process at the University
69 of Ottawa, followed by a brief overview of the literature that addresses the
70 question of business librarian involvement in program reviews. Next, we
71 introduce the corpus of business program review documentation along
72 with the corpus analysis methods that were used to investigate. The results
73 of the analyses of each document type are presented, followed by a more
74 global discussion, which confirms the perception that academic business
75 librarians are marginalized during the academic program review process.
76 This is a missed opportunity for a university to enhance its programs and
77 to promote the library's resources and services through the program review
78 process, so the paper ends by suggesting seven strategies for integrating
79 academic librarians more fully in the program review process for the bene-
80 fit of all program stakeholders.

83 **Background and institutional context**

84 The importance of quality assurance in post-secondary education has been
85 recognized by nations across the globe, and there are many examples of
86

87 both professional accreditation processes (e.g., Morgan, Bergin, & Sallee,
88 2012; Pavlakis & Kelley, 2016) and institutional quality assurance processes
89 (e.g. Baker & Miosi, 2010; Brennan & Bellingham, 2013; Capano, 2014; Lo,
90 2014; Ryan, 2015; Wang, 2014) that have been implemented to review aca-
91 demic programs. In Canada, public education falls under the mandate of
92 the provincial governments, and in the province of Ontario, university
93 quality assurance has gained increasing importance over the past 50 years
94 (Goff, 2013). Initially focused largely on *accountability*, quality assurance
95 has undergone a significant shift, with increasing emphasis now being
96 placed on *program enhancement*. As part of this new orientation, in 2010,
97 each publicly-assisted Ontario university developed its own institutional
98 quality assurance process (IQAP) (Liu, 2015; Weinrib & Jones, 2014), and
99 since 2011, these IQAPs have been used to guide the program review pro-
100 cess. To secure academic standards and to ensure continuous improvement,
101 one of the components that must be part of the IQAP is a protocol for the
102 review of new program proposals, as well as for the cyclical review of exist-
103 ing programs at least once every eight years. Some programs are also sub-
104 ject to external professional accreditation. For example, the Master of
105 Business Administration program at the University of Ottawa is accredited
106 by the following external associations: the American Assembly of Collegiate
107 Schools of Business (AACSB), the Association of MBAs (AMBA), and the
108 European Quality Improvement System (EQUIS). However, the focus of
109 the present study is on the IQAP and not on the external accredit-
110 ation process.

111 As a member of the U-15 Group of Canadian Research Universities, the
112 University of Ottawa is a large research-intensive university that offers
113 close to two hundred graduate programs administered by nine faculties,
114 including the Telfer School of Management. As a publicly-assisted univer-
115 sity, the University of Ottawa has entered into a Strategic Mandate
116 Agreement (SMA) with the Ontario provincial government. A major pur-
117 pose of the SMA is to help guide future growth in universities by encourag-
118 ing more focus on unique strengths. The University of Ottawa's SMA
119 identifies eight areas of strength, including "Management" (University of
120 Ottawa, 2017, p. 28). Meanwhile, the university's most recent strategic plan,
121 *Destination 2020*, indicates that the university will "continue to increase
122 enrolment of top ranked graduate students, with a target of 16% of our
123 total student body by 2015, and 18% by 2020" (University of Ottawa, 2017,
124 p. 6) and "build a world-class library and core facilities to support a world-
125 class research university" (University of Ottawa, 2017, p. 6). This suggests
126 that the university views strong links between graduate studies and library
127 support. Indeed, faculty and students at the Telfer School of Management
128 are supported not only by the main university library but more directly by
129

130 the Management Library, which is the newest addition to the Library
131 Network having opened in October 2007 in the building where the Telfer
132 School of Management is housed. This satellite library provides access and
133 services more than 60 hours a week with the support of library assistants
134 and two full-time business librarians.

135 At the University of Ottawa, the process for reviewing proposals for new
136 graduate programs begins with the drafting of a detailed proposal prepared
137 by the academic unit intending to deliver the program. This document gives
138 a comprehensive presentation of the proposed program's objectives, learning
139 outcomes, curriculum, admission criteria, faculty members, student body,
140 governance and administration, and resources and services, among other
141 information. Once completed, a typical proposal is approximately 50–80
142 pages in length, often with additional appendices. The proposal is then sent
143 out to three reviewers, who later come to the campus for a site visit where
144 they meet with the various program stakeholders. The reviewers submit a
145 report in which they identify the strengths and weaknesses of the proposed
146 program and also make suggestions for its improvement. The academic unit
147 has an opportunity to respond to the reviewers' report. If the university's
148 Quality Assurance Office determines that the proposal is favorable, it will
149 make a positive recommendation to the university Senate. The recommenda-
150 tion is a brief statement to which the proposal document is attached.

151 Meanwhile, the IQAP for the cyclical review of existing graduate pro-
152 grams follows largely similar steps. Instead of a proposal, the academic unit
153 must draft a detailed self-study report of approximately 80–120 pages (plus
154 appendices) which presents the program's objectives, learning outcomes,
155 curriculum, admission criteria, faculty members, student body, governance
156 and administration, and resources and services, etc. The self-study is then
157 sent to three reviewers, who then come to the campus for a site visit. The
158 reviewers prepare a report that identifies the program's strengths and weak-
159 nesses and also make recommendations for its enhancement. The academic
160 unit may then respond to the reviewers' report. Finally, these three key
161 documents—the self-study, the reviewers' report, and the unit's response—
162 are considered by the university's Graduate Program Evaluation Committee
163 (GPEC). Following an analysis of these materials, the GPEC produces a
164 fourth report known as the final assessment report, which contains a deter-
165 mination with regard to a program's quality, specifies any necessary
166 improvements, and reports the results back to the Ontario Universities
167 Council on Quality Assurance. The broad steps, and resulting documenta-
168 tion, associated with the review processes for new and existing programs
169 are summarized in [Table 1](#).

170 Although the strategic plan of the University of Ottawa underlines the
171 importance of the library for supporting high quality graduate programs,
172

Table 1. Main steps and documentation associated with the review processes for new and existing graduate programs at the University of Ottawa.

Main steps of review processes	Documents produced for new program reviews	Documents produced for cyclical program reviews
1. Prepare a detailed program presentation	New program proposal + appendices	Self-study report + appendices
2. Invite reviewers' to meet with program stakeholders	Site visit itinerary	Site visit itinerary
3. Request feedback from reviewers	Reviewers' report	Reviewers' report
4. Invite academic unit to respond	Unit response	Unit response
5. Make a decision about program	Recommendation to Senate	Final assessment report

the requirements set out in the IQAP regarding libraries are minimal. It is stated simply that the proposal and/or self-study must provide “Evidence that there are adequate resources to sustain graduate students’ scholarship and research activities, including library support, information technology support, and laboratory access” (University of Ottawa, 2011, section 6.1.3.5 c). As pointed out by Dalrymple (2001, p. 26), “Standards for specialized libraries in both institutional and programmatic accreditation have often been set without input from librarians,” and a search of the literature reveals that the University of Ottawa is not unique in having minimally specified requirements for library contributions to program reviews (e.g., Chu, 2013; Salvesen, 2006).

Involvement of academic business librarians in program reviews: A brief literature review

Although there have been relatively few formal investigations into the involvement of librarians in program reviews, and even fewer that focus on business programs in particular, two stand out in this regard: White (1999) and Wu and Senior (2016). White (1999) surveyed academic business librarians in the United States to investigate the role that they have played in the process of the accreditation of their business schools by the AACSB. Of the 77 respondents, only 7% indicated that they had been very involved in the accreditation review process. Meanwhile, 27% reported that they had not been involved in the review process at all, and the explanation they provided was that they had not been invited to participate, or that their offer to do so was rejected by the academic unit. Meanwhile, if we consider the study conducted by Wu and Senior (2016) nearly two decades later, the situation does not appear to have changed very much. For their study, Wu and Senior (2016) examined the role business librarians play in the new academic program proposal process on university campuses in the United States. The findings of their extensive survey reveal that many librarians perceive their participation to be “often a mere formality and an after-thought,” noting that in the opinion of the librarians who were surveyed:

216 “Most of the time, teaching faculty wait until the whole proposal is already
217 crafted to contact the library. The implied expectation is for the librarian
218 to provide an affirmative statement that ‘library resources are adequate’”
219 (Wu & Senior, 2016, p. 115). While over 60% of the 75 academic librarians
220 who responded to their survey felt that librarians *should* play a part in the
221 review process, more than 65% of respondents indicated that they were
222 *never* involved (Wu & Senior, 2016, p. 119). In follow-up interviews with
223 nine librarians, a common theme that emerged was that when librarians do
224 try to participate actively in the review process, “anything from the library
225 is considered pro forma and never really taken seriously” (Wu & Senior,
226 2016, p. 121). Looking beyond business programs in particular, other
227 studies where librarians have been surveyed or interviewed have similarly
228 suggested that librarians tend to have a minimal role in program reviews
229 (e.g., Gregory, 1990).

230 In general, the picture that emerges is of a situation where there seems
231 to be considerable room for improved collaboration between faculty mem-
232 bers and academic librarians as part of the program review process.
233 However, this picture is presented mainly from the librarians’ perspective.
234 In addition, it is based largely on indirect evidence, such as surveys and
235 interviews with librarians, who relay their perception that faculty attitudes
236 are a major barrier to their participation. As far as we know, this issue has
237 not been investigated from the perspectives of other key players in the pro-
238 gram review process (e.g., academic unit, reviewers, program evaluation
239 committee). To see the bigger picture, we must investigate the situation
240 from their perspectives also. Moreover, the use of an additional method-
241 ology is advantageous because it permits a sort of cross-verification of the
242 perception-based findings, and it makes it possible to capture different
243 dimensions of the phenomenon and thus contribute to a deeper under-
244 standing of the overall situation (e.g., Creswell & Plano Clark, 2010).
245 Concretely, a more complete picture that is based on both direct and indir-
246 ect measures, and which considers multiple stakeholder perspectives, would
247 serve as a solid base from which to identify best practices and missed
248 opportunities for academic business librarians’ participation in the program
249 review process.

250 As mentioned previously, our modest goal with this pilot study is to see
251 whether the perception-based observations collected by researchers such as
252 White (1999) and Wu and Senior (2016), who used survey- and interview-
253 based methods to investigate the role played by business librarians in
254 program reviews, can be confirmed using more objective corpus-based
255 techniques to obtain direct measures. In addition to introducing a new
256 method for studying this question, we will also expand the body of know-
257 ledge somewhat by including a different type of review process. As noted
258

above, White (1999) focused on external accreditation reviews and Wu and Senior (2016) studied only new program reviews; however, our study also incorporates the cyclical review process for existing graduate programs. In addition, we clearly distinguish between business programs that are categorized as professional programs (i.e., they are delivered primarily in a course-based format with significant input from professionals in practice) and those that are research-oriented programs (i.e., they contain a major thesis component) to see whether any differences can be observed with regard to the role of librarians in the reviews of these two types of graduate program.

Method

This pilot study uses a corpus-based methodology. In this section, we first present the contents of the corpus before describing the corpus analysis tool that was employed and the steps that were followed to investigate the contents of the corpus.

At the University of Ottawa, the Telfer School of Management currently delivers nine programs at the graduate level, as summarized in Table 2. Two of these programs were introduced as new programs during the five-year window of this study (2013–2017), and the remaining seven were subject to a cyclical review during this period. Of the nine programs, four can best be categorized as professional graduate programs, while the other five are research-oriented programs. The program review documentation for these nine graduate programs forms the corpus for the present study. Given the identification of “Management” as an area of strength in its SMA with the provincial government, the University of Ottawa has a definite interest in ensuring that the quality of the graduate programs offered by the Telfer School of Management remains high.

For each of the nine graduate programs in a business-related field, five key pieces of program review documentation were examined:

1. Program presentation (new program proposal or self-study of existing program) prepared by the academic unit;
2. Library report prepared by an academic librarian and included as an appendix to the self-study (if produced);

Table 2. Graduate programs at the University of Ottawa’s Telfer School of Management.

New graduate programs		Existing graduate programs
• Professional programs	• Master of Business in Complex Project Leadership	• Master of Business Administration
		• Master of Engineering Management
		• Master of Health Administration
• Research-oriented programs	• PhD in Management	• MSc in Health Systems
		• MSc in Management
		• MSc in Systems Science
		• PhD in E-Business

3. Itinerary for the site visit by reviewers;
4. Reviewers' report;
5. Academic unit's response to the reviewers' report;

For the seven programs that underwent a cyclical review, a sixth document was also studied:

6. Final assessment report produced by the university's Graduate Program Evaluation Committee and submitted to the Ontario Universities Council on Quality Assurance.

Note that the recommendations to Senate for the two new programs were not included in the corpus as these consist essentially of the program proposal document.

The corpus documents were examined with the help of corpus analysis software known as WordSmith Tools (Scott, 2017). Bowker (2018) provides a detailed description of different ways that corpus-based techniques can be effectively applied in LIS research. For the present study, two basic types of analysis were conducted: quantitative analyses, such as calculating the total percentage of each document that was devoted to discussing library matters, and qualitative analyses, such as examining sections of the documents that discuss library-related topics to identify themes.

One of WordSmith's features is the concordancer, which enables users to search for and display Key Words in Context (KWIC). A sample of a KWIC display can be seen in Figure 1. To identify sections of the documents that contained discussions of library-related topics, we began by using the search term *librar**. We then examined the retrieved occurrences of these words in their surrounding context (e.g., sentences or paragraphs) to identify other LIS terms that were being used as part of these discussions. Examples of additional terms that were identified include: *catalogue*,

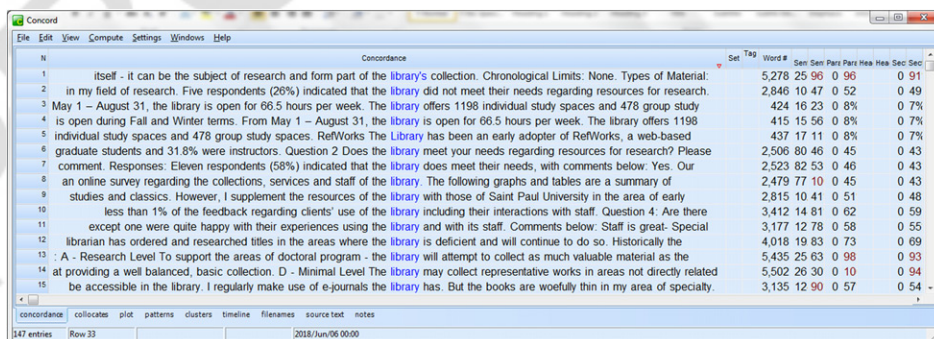


Figure 1. A screenshot of a KWIC concordance for the term *librar* generated using the WordSmith Tools concordancer.

345 *collection, databases, indexes, journals, libguide, library catalogue, literature*
346 *search, reference desk, research articles, and Scopus.* Using these search
347 terms, further searches were conducted to retrieve additional contexts, and
348 within these contexts, more new LIS terms were identified. We continued
349 to examine the documents in this iterative fashion until we felt confident
350 that we had identified all the sections of each document that contained a
351 discussion of library-related issues. We then calculated the percentage of
352 each document that was dedicated to these library discussions by first
353 determining each document's total word count, and then counting the
354 number of words in the sentences/paragraphs about libraries and express-
355 ing this as a percentage of the overall content.
356

357 **Results**

358
359 In this section, we present and discuss our findings for each of the program
360 review document types, before proceeding to a more global discussion. The
361 categories of documents are discussed in the order in which they are gener-
362 ated as part of the program review processes outlined above: program pre-
363 sentations (i.e., proposal for new programs and self-studies for existing
364 programs), library reports, itineraries for site visits, external reviewers'
365 reports, academic unit responses, and, for the cyclical reviews only, the
366 final assessment reports.
367

368 **Program presentations**

369
370 As noted above, the first step in the review process for new and existing
371 programs is for the academic unit to prepare a detailed program presenta-
372 tion. At the University of Ottawa, a very basic template is provided to
373 guide the initial development of the either the new program proposal or
374 the self-study of an existing program. However, in recognition of the fact
375 that graduate programs may differ significantly from one another, elabora-
376 tion and customization of the template is allowed and thus stakeholders
377 have considerable flexibility in presenting their program. Once completed,
378 the main body of a new program proposal is usually between 50 and 80
379 pages in length, while a self-study report is typically between 80 and 120
380 pages. In both cases, additional material may be appended.
381

382 As presented in [Table 3¹](#), for each of the nine program presentation
383 documents, we calculated the total number of words, as well as the number
384 of words found in sections that discussed library-related matters. The
385 length of the program presentations varies considerably, with the shortest
386 being just over 15,000 words and the longest being more than double that
387 length at nearly 34,000 words, with the overall average being 21,294 words.

Table 3. The word count and percentage of each program presentation that discusses library issues.

Program	Total word count	Word count of discussions about libraries	Percentage of program presentation focusing on libraries
Professional programs			
Master of Business Administration	33,885	353	1.04
Master of Business in Complex Project Leadership	17,269	317	1.84
Master of Engineering Management	16,524	131	0.79
Master of Health Administration	19,858	402	2.02
<i>Average</i>	21,884	301	1.38
Research-oriented programs			
MSc in Health Systems	22,369	376	1.68
MSc in Management	15,450	353	2.28
MSc in Systems Science	17,622	174	0.99
PhD in E-Business	22,836	260	1.14
PhD in Management	25,830	372	1.44
<i>Average</i>	20,821	307	1.47
<i>Overall Average</i>	21,294	304	1.43

Meanwhile, as summarized in Table 3, the percentage of the content that focuses on library topics matters in each of these documents is extremely small, with the highest being just 2.28% and the overall average being 1.43%.

Each of the nine program presentation documents contains a sub-section entitled “Library,” which is a section that appears in the template provided by the university’s quality assurance office. It is noteworthy that this sub-section is part of a larger section entitled “Physical Resources and Financial Support” which would seem to reinforce the notion of library as a place where resources are housed rather than as one where services are offered. It is also worth noting that the template contains other sections where library-related matters could have been incorporated, such as the section entitled “Academic services at the university level that contribute to academic quality of programs.”

Three of the program presentations have just a single paragraph in the “Library” sub-section, which consists primarily of an invitation for readers to consult the appended library report. Five other self-studies contain three paragraphs in this section, and the remaining one has four paragraphs about the library. In total, there are eight additional references to library-related topics scattered throughout other sections of the nine program presentations, with three being the highest number of additional references appearing in any one document. Three of the program presentations had no additional references outside the “Library” sub-section. Overall, discussions of the library are not well-integrated into or woven throughout the broader description of an academic program as part of the program presentations; most mentions of the library outside of the “Library” sub-section consist of a single sentence or a cross-reference back to that sub-section or to the appendix containing the library report. Moreover, when the library

is discussed, it is typically with regard to its physical resources—catalog, collection, databases, indexes, journals, libguides, research articles, study carrels—and only rarely do these discussions touch on librarians or library services, such as workshops or reference services. In the rare cases where services are mentioned, the hours of operation (e.g., of the reference desk) are the main subject. This is problematic because, as emphasized by Chu (2013, p. 43) in a presentation about assessing library support for program accreditations:

Library support is more than quantitative information that may be supplied to an academic department upon request. In addition to books, journals and electronic resources, library support should also include instruction, technical services, and other areas such as administrative oversight, physical facilities, space usage and information infrastructure.

Library reports

The library reports are prepared by academic librarians and are optionally appended to the program presentation documents. The university's quality assurance office does not provide a template for the library report, but the library team has prepared one. Again, however, there is scope for customization. In this study, two of the nine documents contained no library appendix, meaning the short descriptions (c. 300–350 words) contained in the main body of the text (as described in the previous section) constitute the only discussion of the library in relation to these programs. For the seven documents that did include a library report, these were prepared by three different librarians, and as the data in Table 4 indicate, some library reports provide more detail than others: the shortest report is just under 2000 words, while the longest is nearly 3500 words.

It worth noting that the two programs that elected not to include a detailed library report are professional programs. In contrast, all of the

Table 4. Word count and authorship of library report appendices.

Program	Total word count of library report (appended to self-study)	Librarian who prepared report
Professional programs		
Master of Business Administration	None	N/A
Master of Business in Complex Project Leadership	None	N/A
Master of Engineering Management	2675	Librarian B
Master of Health Administration	2355	Librarian A
<i>Average</i>	1258	
Research-oriented programs		
MSc in Health Systems	1953	Librarian A
MSc in Management	2535	Librarian A
MSc in Systems Science	3450	Librarian C
PhD in E-Business	3297	Librarian B
PhD in Management	2552	Librarian A
<i>Average</i>	2757	
<i>Overall Average</i>	2091	

474 research-oriented programs did include a library report, and these were
475 typically the longer reports (with the exception of the MSc in Health
476 Systems). If we compare the average length of the reports for the profes-
477 sional and research-oriented programs, we see that the average for the
478 research-oriented programs is more than twice as long. However, if we
479 were to calculate the average for the professional program library reports
480 counting only those that actually contained such a report, the difference
481 would be much less extreme: an average of 2515 words for the professional
482 programs versus 2757 words on average for the research-ori-
483 ented programs.

484 In all cases where a library report is included, we see that descriptions of
485 library *services* are given greater attention in these reports than they are in
486 the program presentations, the latter of which focus primarily on the
487 library's physical resources. Not surprisingly, this suggests that even if fac-
488 ulty members may not realize it, business librarians are fully aware that the
489 provision and use of both library materials *and* services affects the quality
490 of the students' educational experience.

493 ***Itineraries***

494 As part of each graduate program evaluation, there is a site visit by external
495 reviewers who are experts in the subject area covered by program. A typical
496 site visit takes place over two business days. The nine site visit itineraries
497 were examined to determine whether the external reviewers toured the
498 library or met with a librarian, and if so, for what length of time. The
499 results are summarized in [Table 5](#).

500 In reviewing the itineraries, we can see that two of the nine site visits—
501 both of which corresponded to professional programs—did not feature
502 any library tour or librarian meeting. Another professional program
503 incorporated the library as one stop on a multi-facility tour that lasted
504 30 minutes in total. Moreover, only one of the professional program site
505 visits included a meeting with a business librarian, and this was a short
506 15-minute session. In contrast, all of the itineraries for the research-ori-
507 ented programs included at least a tour, and three of the five included a
508 meeting with a business librarian that was between 30 and 45 minutes
509 in length.

510 Considered globally, only four of the nine itineraries specified that the
511 reviewers actually had a meeting with a business librarian. This means that
512 in more than half (56%) of the program review site visits, the reviewers
513 received information about the library from someone other than a business
514 librarian, if at all.

Table 5. Information regarding the inclusion of libraries and librarians in the site visits.

Program	Tour of the library	Meeting with librarian	Duration
Professional programs			
Master of Business Administration	no	no	N/A
Master of Business in Complex Project Leadership	yes	no	30 minutes "Tour of facilities including library"
Master of Engineering Management	yes	yes	15 minutes
Master of Health Administration	no	no	N/A
Research-oriented programs			
MSc in Health Systems	yes	no	45 min "Quick tour of facilities (including classroom space, graduate student lab space, social space, and library resources)"
MSc in Management	yes	yes	45 minutes for
MSc in Systems Science	yes	no	30 minutes for "Tour of facilities (library, labs, classrooms)"
PhD in E-Business	yes	yes	30 minutes
PhD in Management	yes	yes	45 minutes

Reviewers' reports

After reviewing the program presentation material and conducting a site visit, the reviewers collectively prepare a report in which they share their observations about the strengths and weaknesses of the proposed or existing program and make recommendations for program improvement. Reviewers are not required to follow a template; however, they are asked to keep in mind at least the following four points when conducting their evaluation and preparing their report:

- Does the program have the resources necessary to deliver a good quality program and to offer a positive student experience?
- Does the program make sense within the overall context of the discipline and will the program's graduates meet disciplinary expectations?
- Does the program have any particular strengths or distinctive characteristics?
- Does the program have a reasonable and adequate plan to address any perceived shortcomings?

As presented in [Table 6](#), for each of the nine reviewers' reports, we calculated the total number of words in the report, as well as the number of words found in sections that discussed library-related matters. The reviewers' reports range in length from under 2000 words to just over 4500 words, with an average length of 3092 words. Of the nine reports, eight contain at least some mention of libraries. On average, the percentage of the reviewers' reports that are devoted to discussing library issues is 1.07%.

The library was mentioned in eight of the nine reviewers' reports; not surprisingly, the reviewers' report in which there was no mention of the

Table 6. The word count and percentage of each reviewers' report that discusses library issues.

Program	Total word count	Word count of discussions about libraries	Percentage of reviewers' report focusing on libraries
Professional programs			
Master of Business Administration	3569	0	0
Master of Business in Complex Project Leadership	2496	22	0.88
Master of Engineering Management	3092	62	2
Master of Health Administration	3099	14	0.45
<i>Average</i>	3064	25	0.82
Research-oriented programs			
MSc in Health Systems	3942	15	0.38
MSc in Management	3025	75	2.48
MSc in Systems Science	1886	36	1.9
PhD in E-Business	4458	30	0.67
PhD in Management	2261	46	2.03
<i>Average</i>	3114	40	1.28
<i>Overall Average</i>	3092	33	1.07

library was the one corresponding to the professional program that included neither a library report nor a library tour/librarian meeting. However, in examining the eight existing reports, it appears that some reviewers' comments on the perceived adequacy library resources and services are based on their reading of the program presentation and/or discussions with faculty or students, and not on a discussion with a librarian. For example, consider the following comment made about one of the professional programs, which constituted the entirety of the library-related discussion in the reviewers' report:

"Students spoke positively about the library and the library facilities that are available to them."

In three of the reviewers' reports, the library was mentioned only briefly with a remark to the effect that the programs in question appear to be well supported. The focus in these comments was on the library, rather than on the librarians or their services. In two of the three cases, these comments were associated with a professional program:

"The Telfer school library offers a very well-resourced environment for the program."

"The facilities we toured (labs, library) seemed well designed to support the mission of the Program."

"We believe there are many excellent resources for the students such as the library and the research office within Telfer."

Meanwhile, three of the reports offered a slightly more detailed assessment of the library and placed more emphasis on services (rather than on physical resources). In all three cases, these comments were made about research-oriented programs and they corresponded to the reviews in

603 which the reviewers actually met with a business librarian during the
604 site visit:

605 “The team then spoke with the Librarian for Management. She stated that there was
606 more emphasis on services. A new workshop series for grad students is being
607 offered, including search strategies, research skills, and proper referencing.
608 Acquisitions are done in consultations.”

609 “In addition to this administrative support, MSc students have access to superb
610 library resources. Having a physical location within the Desmarais building that is
611 staffed by a Librarian who is an expert in Management content is a huge advantage
612 for students. In addition, Telfer School of Management makes a significant
613 investment in licensing a whole range of databases for students, ensuring that
614 students in any area of study will have access to leading edge material.”

615 “Library and digital resources are comparable to other programs in Canada. There
616 are 2 full-time librarians for the faculty. The onsite library resources in the
617 Desmarais Building provide an excellent opportunity for students to consult
618 academic and other resources, including data, for their research.”

619 Although none of the reviewers’ reports contained any negative or crit-
620 ical comments about the library or library services, in more than half the
621 cases, there is a strong impression that the reviewers either had no direct
622 experience of the library (e.g., they had no tour or meeting with the librar-
623 ian and relied solely on student feedback), or that they simply “ticked a
624 box” by making a generic and superficial statement about the library (e.g.,
625 “The facilities we toured (labs, library) seemed well designed to support the
626 mission of the Program”).

627 **Unit responses**

628
629
630
631 Once the reviewers’ report has been received, the academic unit that deliv-
632 ers the program then has an opportunity to respond. As summarized in
633 [Table 7](#), we have calculated both the length of the nine unit response docu-
634 ments and the percentage of each document devoted to discussing library-
635 related issues. We can see rather dramatic differences in the lengths of the
636 program responses, with the shortest being just under 900 words, and the
637 longest approaching four times that length.

638 In examining the response documents, it is clear that the units focus the
639 vast majority of their efforts on responding to specific concerns or areas
640 for improvement that have been identified by the reviewers. Therefore,
641 given that no specific library-related concerns were raised in the reviewers’
642 reports, it is perhaps not surprising that only three of the nine program
643 responses mention the library. Moreover, these discussions are essentially
644 just acknowledgements of the reviewers’ positive comments, such as:
645

Table 7. The word count and percentage of each unit's response that discusses library issues.

Program	Total word count	Word count of discussions about libraries	Percentage of unit's response focusing on libraries
Professional programs			
Master of Business Administration	2529	0	0
Master of Business in Complex Project Leadership	1448	0	0
Master of Engineering Management	891	0	0
Master of Health Administration	2819	14	0.5
<i>Average</i>	1922	4	0.21
Research-oriented programs			
MSc in Health Systems	2028	0	0
MSc in Management	3004	41	1.36
MSc in Systems Science	1215	0	0
PhD in E-Business	986	0	0
PhD in Management	3327	29	0.87
<i>Average</i>	2112	14	0.66
<i>Overall Average</i>	2027	9	0.44

“The reviewers note that the Program is well resourced and supportive (e.g.-library, technology).”

“We also wish to thank the Reviewers for their kind words regarding the support several of our offices provide our faculty and students, including the library and research office.”

Final assessment reports

For cyclical reviews of existing programs, the last step is the production of a final assessment report (FAR) by the members of the Graduate Program Evaluation Committee—which is composed primarily of faculty members from across the university—after they have taken into consideration the self-study, the reviewers' report, and the unit's response. The FAR contains just three main sections: program strengths, areas for program enhancement, and specific recommendations for improvement (which include timelines and an indication of which authorities will oversee the implementation of the recommendations). As noted above, this document, which concludes the internal review process, is later sent to the provincial quality assurance council. As shown in **Table 8**, there is variation in the length of the FARs, but the average length is a little over 1000 words. Only one of the FARs contains any mention of library-related topics, and this consists of the following brief statement in the section on program strengths for one of the research programs: “Students have access to superb library resources”.

Discussion

Overall, the results of this corpus-based investigation give a clear indication that, apart from the library report appendices, none of the documents

Table 8. The word count and percentage of each FAR that discusses library issues (for cyclical reviews of existing programs only).

Program	Total word count	Word count of discussions about libraries	Percentage of FAR focusing on libraries
Professional programs			
Master of Business Administration	731	0	0
Master of Engineering Management	1015	0	0
Master of Health Administration	663	0	0
<i>Average</i>	803	0	0
Research-oriented programs			
MSc in Health Systems	1311	0	0
MSc in Management	1166	7	0.60
MSc in Systems Science	3674	0	0
PhD in E-Business	1347	0	0
<i>Average</i>	1875	2	0.11
<i>Overall Average</i>	1097	0.78	0.07

associated with academic business program reviews place much emphasis on library-related issues. What is more, two of the nine program presentation documents did not even include a library report appendix, meaning that for these programs, the entire description of the library and its services in support of the program was contained in the program presentation document in a short discussion totaling between 300 and 400 words. In the most extreme case, one of the professional programs contained no library report, included no library tour or librarian meeting during the site visit, and had just 1.04% of the self-study dedicated to discussions of library matters.

With the exception of the library reports, the documents in the corpus are prepared by groups that consist primarily of academic faculty. Therefore, the corpus evidence lends support to the perception-based observations made by researchers such as Wu and Senior (2016), who note that business librarians are given the impression by faculty members that library-related issues are not of great concern to program reviews.

Meanwhile, an analysis of the KWIC contexts reveals that there is a noteworthy difference in the way that libraries are portrayed in the program presentations as compared to in the library reports. In the program presentations, the limited discussions of library-related issues that do exist focus on physical resources (e.g., collection, databases, journals), and only rarely do these discussions touch on librarians or library services, such as workshops or reference services. In contrast, not only do the library reports offer a detailed description of the pertinent part of the collection and other resources, but they also provide information about services offered by library staff in support of teaching and research. These findings support observations made by Salvesen (2006) and Chu (2013), who emphasize that predominantly collection-focused descriptions of the library are insufficient, and that evidence of broader library support for quality scholarship should be incorporated into the program review documents. In addition, this

732 difference in the way that libraries are presented in the two documents is
733 indicative of two related underlying problems. First, it suggests that the pro-
734 gram presentation authors may not be fully aware of or appreciate the range
735 of services available through the library. This in turn suggests that business
736 librarians are not actively included as members of the team responsible for
737 preparing the main program presentation document, but rather, they are at
738 most called upon to furnish an appendix, and sometimes not even that.

739 The fact that the information about library services is located principally
740 in the appendix is worrisome because readers may not consult it in depth
741 given that material in an appendix is usually considered to be supplementary
742 rather than essential. The relegation of detailed library-related information to
743 an appendix lends weight to the observations made by Wu and Senior
744 (2016, p. 115), for example, suggesting that business librarians are included
745 in program reviews only as an afterthought. Because library services are dis-
746 cussed only in the appendix and not in the main body of the program pres-
747 entation, the visibility and importance of these services are minimized, and
748 business programs miss out on opportunities to draw attention to ways in
749 which the library can support the students' educational experience or to pro-
750 mote value-added services that enhance their business programs.

751 Likewise, not including librarians in the site visits represents another
752 missed opportunity for business programs to create a positive impression.
753 Fewer than half (44%) of the site visits included a scheduled meeting with
754 a business librarian, and two programs did not even incorporate a brief
755 library tour. This is in line with the findings of White (1999) and Wu and
756 Senior (2016), who reported that 27% and 65% of academic business librarians
757 who responded to their respective surveys indicate that they have
758 never been invited by the academic unit to participate in a program review.
759 In our study, this would seem to represent a missed opportunity for a pro-
760 gram to put its best foot forward because in those instances where
761 reviewers did meet with business librarians, this meeting seems to have
762 made a positive impression and led to comments that were derived from
763 the reviewers' own direct observations rather than based on second-hand
764 remarks made by students or faculty. Comments from the reviewers'
765 reports such as "staffed by a Librarian who is an expert in Management
766 content is a huge advantage for students," "more emphasis on services,"
767 "new workshop series for grad students is being offered, including search
768 strategies, research skills, and proper referencing," and "Acquisitions are
769 done in consultations" would seem to confirm that allocating even
770 30 minutes out of a two-day visit to meet with a business librarian will be
771 informative and will generate a favorable impression of the program that
772 will be recorded in the reviewers' report. It is also worth noting that the
773 reviewers who met with business librarians tended to place more emphasis
774

775 on the library services, rather than on the physical resources, in their
776 reports. In contrast, when no such meeting took place, reviewers tended to
777 make generic statements that only serve to minimally and superficially
778 “check off” the requirement that the program is adequately resourced.

779 Finally, the data in this study reveal an overall trend of diminishing visi-
780 bility for the library over the course of the program evaluation process.
781 While all nine of the program presentations make at least some reference
782 to library issues, only seven include a library report as an appendix and
783 just four programs incorporate a meeting with a librarian on the itinerary.
784 By the time the program review concludes with the final assessment report,
785 only one mentions the library. Moreover, while the overall marginalization
786 of business librarians in the program review process applies to both profes-
787 sional and research-oriented programs, it is somewhat more pronounced in
788 the professional programs, which tend to accord less attention to library-
789 related matters. In contrast, the reviews of the research-oriented business
790 programs contain slightly more discussions of the library and place slightly
791 more emphasis on its services. This suggests that while there is substantial
792 room for improvement across the board when it comes to involving aca-
793 demic librarians more fully in business program reviews, there is even
794 more work to do with regard to the professional programs in terms of rais-
795 ing the visibility of the library and its services and emphasizing their value
796 for students and faculty associated with such programs.
797

800 **Concluding remarks**

801 If we accept that academic libraries exist to improve the quality of studying
802 and research, then academic business librarians should be key players in
803 assuring the quality of graduate programs in business and, by extension, in
804 the program review process. However, the findings of this corpus-based
805 investigation of the documents associated with the program review process
806 at the University of Ottawa’s Telfer School of Management support prior
807 perception-based observations in the LIS literature that academic business
808 librarians are marginalized in the academic program review process. Some
809 of the ways in which this marginalization occurs include the following:

- 811 a. teams that prepare program presentations are made up of faculty and
812 do not include business librarians;
- 813 b. library reports are not required components of the program
814 presentations;
- 815 c. services provided by business librarians are largely unacknowledged out-
816 side of the appendices;
817

- d. meetings with business librarians are not systematically included in the itinerary of a site visit;
- e. comments made by reviewers (i.e., faculty from other universities) about library matters may be based on second-hand information received from students or faculty rather than on direct observations or discussions with librarians;
- f. unit responses, which are prepared by faculty members, do not systematically call attention to library-related strengths observed by the reviewers;
- g. members of the program evaluation committee, who are faculty, rarely select library-related matters for recognition in the final assessment reports.

Even though this pilot study was conducted at a single institution, the best practices and missed opportunities that emerged from the study may well be relevant on a larger scale. Among the best practices, we can count requiring a library report to be prepared by a business librarian and formally scheduling a meeting with a librarian as part of the site visit. In this study, the most detailed and positive comments about libraries, including comments about services as well as resources, were made in the reports submitted by reviewers who had had the opportunity to meet with business librarians and to read a detailed library report. On the contrary, in those cases where reviewers did not meet with business librarians or read library reports, the reviewers' reports contained almost no comments about the library, and the scarce comments that did appear were exclusively focused on library resources and were extremely brief and superficial.

In their study, Wu and Senior (2016, p. 123) found that strong working relationships between librarians and faculty in the business school is “a predictor for effective librarian participation in the new program review process.” Based on the findings, best practices, and missed opportunities that have been identified through the present study, we suggest seven strategies—many of which incorporate an element of relationship building—that can help business librarians and faculty members to work together meaningfully to present a more comprehensive and accurate description of library support for graduate programs, and to maintain an ongoing dialog with regard to continuous program improvement.

- 1) Recruit senior leadership to act as champions for the library

Wu and Senior (2016, p. 125) recommending “cultivating supporters” or “champions” among business school faculty, and certainly this is a valuable suggestion. However, we would take it one step further and suggest garnering support from the senior leadership within the business school. Given

861 that vice-deans or program directors within the business school are usually
 862 responsible for managing key elements of the review process—such as iden-
 863 tifying the team members who will lead the development of the self-study,
 864 prepare the itinerary or coordinate the response to the reviewers' report—
 865 we suggest that these leaders are particularly well-positioned to help cham-
 866 pion a more prominent role for business librarians in the program review
 867 process. In this capacity, a vice-dean or director could seek to ensure that
 868 all participants have a clear and common understanding of the markers of
 869 success for the library during a program review so that everyone is on the
 870 same page as to what is important and what ought to be reported.

- 871
 872 2) Explain and emphasize the value of libraries for *both* professional and
 873 research-oriented programs.
 874

875 Although faculty associated with research-oriented programs seem to be
 876 more aware of or open to recognizing the value that the library and its
 877 services have for graduate programs in the business school, it is important
 878 for professional programs to ensure that their stakeholders are informed
 879 about and able to avail of library resources and services as well. In some
 880 cases, this may first involve raising awareness among faculty members with
 881 regard to the program-relevant services offered by the library, so that they
 882 may in turn promote these opportunities to their students. Once again,
 883 having the support of “champions” among the business school faculty will
 884 be helpful for this endeavor.
 885

- 886 3) Include a librarian on the team that develops the program presentation.
 887

888 While faculty appear to be somewhat comfortable discussing some aspects
 889 of the library's collection, it is important to remember that physical resources
 890 are necessary but not sufficient for ensuring a positive student experience
 891 and training highly qualified personnel to become productive members of
 892 the business community. Recall Chu's (2013, p. 43) observation that library
 893 support for program reviews consists of more than supplying quantitative
 894 information about books, journals, and electronic resources, but should also
 895 include instruction, technical services, and information about space usage
 896 and information infrastructure. Including a business librarian on the team
 897 that develops the program presentation will ensure that not only the collec-
 898 tion, but also the library's value-added services, are emphasized as part of the
 899 program presentation and are promoted to program stakeholders.
 900

- 901 4) Weave discussions about library resources and services into relevant sec-
 902 tions throughout the program presentation.
 903

904 Once a business librarian has been welcomed to the team charged with
905 developing the program presentation, that librarian can identify sections of
906 the program presentation where discussions of services and resources can
907 be suitably contextualized instead of being discussed only in a self-con-
908 tained “Library” section—or an appendix—where they are presented out of
909 context. Incorporating relevant highlights from a supporting appendix into
910 the body of the report will facilitate on-point messaging and right-time
911 marketing of the library’s contributions to the students’ educational experi-
912 ence. Overall, an integrated presentation will be more effective and have a
913 greater impact on the reviewers, and it will also serve to raise visibility
914 among program stakeholders of what the library has to offer.
915

916 5) Schedule a meeting with a librarian during the site visit.
917

918 Business librarians are better able than faculty members to explain how
919 the library supports the program and its student learning outcomes. It
920 makes sense for programs to utilize their strongest resources at the right
921 moments in the review process. The results of this study suggest that meet-
922 ing with a business librarian for at least 30 minutes is time well spent for
923 the reviewers. Therefore, it is in a program’s best interests to make sure
924 that such a meeting takes place during the site visit. In addition, business
925 librarians should be informed of the review criteria and of any matters that
926 the reviewers would like to learn more about, so that they can make the
927 most of the available meeting time.
928

929 6) Invite a librarian to site on the program review committee as a
930 resource person.
931

932 A program review committee may be made up of both faculty members,
933 who have voting privileges, and resource staff, who can supply different
934 kinds of specialized knowledge. At the University of Ottawa, the graduate
935 program evaluation committee currently includes two such resource per-
936 sonnel: the quality assurance coordinator and a curriculum design specialist
937 from the Centre for University Teaching. However, there is currently no
938 librarian sitting on this committee. It would be beneficial for a program
939 review committee to have access to a resource person who is knowledge-
940 able about the library’s role and contributions to graduate programs, and
941 who could help to raise awareness about these contributions and to recom-
942 mend ways in which the library could further improve these programs. As
943 mentioned above, Wu and Senior (2016, p. 123) identify relationship build-
944 ing between business librarians and faculty as key to promoting closer col-
945 laboration on program reviews, noting “activities to develop such a
946

947 relationship could include serving on campus committees with department
948 faculty”. Meanwhile, Costella, Adam, Gray, Nolan, and Wilkins (2013)
949 report on an initiative at the University of Western Ontario to include
950 librarians in their undergraduate program review process by giving a librar-
951 ian a seat on the Senate Subcommittee for Undergraduate Program Review.
952 A similar initiative at the graduate level could help to give librarians a
953 voice, and in turn to increase the recognition of their current and potential
954 role in the program review process.
955

956 7) Make the results of program reviews available to librarians.
957

958 Business librarians are not typically included as members of the team
959 that develops the program presentation, the academic unit, or the program
960 review committee. As a result, there is no clear mechanism for informing
961 business librarians about the results of the program review at any stage. It
962 is discouraging for anyone to work hard toward the goal of supporting stu-
963 dents’ educational experience, yet to receive no feedback about the positive
964 results, misplaced energy, or current gaps related to these efforts. Business
965 librarians deserve to hear about the reviewers’ feedback, as well as the
966 results of the final assessment report or program recommendation. By shar-
967 ing feedback with business librarians, academic programs can build stron-
968 ger relations with these librarians, who will in turn feel more motivated
969 and better able to provide targeted and enhanced support for the programs.
970 This type of virtuous cycle stands to benefit all stakeholders in the program
971 and will help business librarians to realize a role as full partners in the edu-
972 cational enterprise. It may even generate additional as-yet-unknown posi-
973 tive side-effects for relations between faculty and librarians.
974

975 In closing, the main goal of this study was to determine whether the find-
976 ings of survey- and interview-based studies (e.g., White 1999; Wu & Senior,
977 2016), which suggest that academic business librarians’ perceive that they are
978 marginalized during the program review process, could be confirmed
979 through direct evidence obtained from an objective corpus-based investiga-
980 tion of program review documents. The results of the present corpus-based
981 pilot study complement the prior perception-based studies and strengthen
982 the finding that business librarians are not meaningfully involved in aca-
983 demic program reviews. In addition, it shows that while there is significant
984 room for improvement across the board when it comes to involving business
985 librarians more fully in the program review process, the integration of these
986 librarians in reviews of professional graduate programs is particularly poor,
987 as compared to research-oriented graduate programs.

988 This investigation was limited in that it considered only nine graduate
989 programs—four professional and five research-oriented—offered by a single

990 business school in Canada. However, the pilot study produced informative
991 results which suggest that it could be worth extending this type of corpus-
992 based study to include other programs and institutions. It is hoped that the
993 discussion and strategies suggested in this article will serve to advance the
994 discussion about the contributions of academic business librarians—both
995 actual and potential—to the academic program review process, and to
996 involve them more meaningfully in program reviews with a view to
997 enhancing the overall quality of business programs for the benefit of
998 stakeholders.
999

1000 Note

- 1001 1. Owing to the very small values for the library discussions, it was difficult to display
1002 this information graphically without using a log-based scale, which can be challenging
1003 to read. We therefore chose to present the information in tabular format.
1004

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1018 ORCID

1019 Lynne Bowker  <http://orcid.org/0000-0002-0848-1035>
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