

**Supporting the Changing Practices of Teaching in Business
at Queens College, City University of New York**

An Ithaka S+R Research Project

Local Report
5 November 2019

James Tasato Mellone
Historical, Cultural, and Social Sciences Librarian
james.mellone@qc.cuny.edu

Edward F. Wall III
Adjunct Reference Librarian
formerly *Business Research and Instruction Librarian*
edward.wall@qc.cuny.edu

Qiong Xu
Data Services Librarian
qiong.xu@qc.cuny.edu

Queens College Libraries
65-30 Kissena Blvd.
Queens, New York 11367 USA

ABSTRACT

This investigation sheds light on the teaching practices of Queens College (QC) faculty in Business. It identifies the Business faculty's teaching support needs in order to develop ideas for improving Library services to them. This report is the result of research conducted under the guidance of Ithaka S+R, and in accordance with Office of Regulatory Compliance procedures at QC. Using a grounded theory approach to qualitative research, the investigators conducted in-person audio-recorded semi-structured interviews of seven full-time QC faculty who teach Business courses. Evidence derived from the transcribed interviews informed analysis of the current state of QC's Business teaching experience, covering the areas of teaching methods, curricular goals & examinations, teaching tools, student outcomes & challenges, and teaching sources. This report concludes that the Library can investigate support opportunities in six areas through further discussions within its department, with potential college partners, and with the Business faculty. (1) Events in Library spaces may foster Business student engagement and career readiness. (2) Instruction efforts can expand the Library teaching of Business-related information and skills. (3) Personnel knowledgeable to teach Business-related information and skills are needed. (4) Promotion efforts may be able to address student challenges. (5) Resources, new or improved, can be acquired for Business-related information content. (6) Spaces can be extended for all kinds of teaching, and new spaces can be developed for data & trading.

KEYWORDS

Academic libraries
Business education
Business information services
Business librarians
Business resources
Business students
Business teachers
Libraries & business
Library instruction
Library reference services

TABLE OF CONTENTS

1. INTRODUCTION

2. METHODOLOGY & DATA

3. SUMMARY OF FINDINGS

3.1 Faculty Self-reliance

3.2 Library Outreach on Current Supports

3.3. Library Supports to Investigate

4. TEACHING FOUNDATIONS

4.1 Teaching Methods

4.2 Curricular Goals & Examinations

4.3 Teaching Tools: Overview

4.4 Teaching Tools: Current Supports

4.5 Teaching Tools: Library Supports to Investigate

5. STUDENT OUTCOMES & CHALLENGES

5.1 Student Outcomes: Overview

5.2 Student Outcomes: Library Supports to Investigate

5.3 Student Challenges: Overview

5.4 Student Challenges: Library Supports to Investigate

6. TEACHING SOURCES

6.1 Teaching Sources: Overview

6.2 Teaching Sources: Current Supports

6.3 Teaching Sources: Library Supports to Investigate

7. CONCLUSION

Appendix 1: Codes

Appendix 2: Semi-Structured Interview Guide

1. INTRODUCTION

This investigation is intended to shed light on the teaching practices of Queens College (QC) faculty in Business. The goal is to identify the faculty's teaching support needs in order to develop ideas for improving Library services to them.

The teaching of business at QC occurs through the departments of Economics, and Accounting & Information Systems, and the program of Business and Liberal Arts (BALA). Historically, QC offerings in business were through the BALA program, which offers a 24-credit minor, and through Accounting which offers a Bachelor of Arts in Accounting. Several years ago the Economics department developed the Bachelor of Business Administration (BBA) degree, a selective program to which students must formally apply.

The BBA has the three majors of Actuarial Studies, Corporate Finance, and International Business. All BBA students must take core Business courses such as Business Economics, Business Law, Finance, Macroeconomics, Microeconomics, and Statistics. Students in the three majors also must take several required courses in the varied areas of Econometrics Financial Management & Markets, International Studies & Business, and Investment Analysis & Management.

The enrollment of Business students the past five years remains strong, with an average of approximately 3550 students per year: 600 BALA minors, 1700 Accounting majors, 1050 non-BBA Economics majors, and 200 BBA majors. Given the stability of Business student enrollment it seems a propitious time to investigate QC teaching in Business, its potential needs, and the support it receives.

2. METHODOLOGY & DATA

This report is the result of research conducted under the guidance of Ithaca S+R, and in accordance with Office of Regulatory Compliance procedures at QC. As the QC research investigators the authors are solely responsible for its content.

Using a grounded theory approach to qualitative research the investigators conducted in-person audio-recorded interviews of QC faculty who teach Business courses. The study took place during the period of September 2018 through August 2019. During the Fall 2018 semester the investigators completed the required preparations for the study. In the Spring 2019 semester invitations were sent via email to thirty-two faculty who teach Business in the departments of Accounting & Information Systems, BALA, and Economics. Seven faculty were interviewed using questions from a semi-structured interview guide created by Ithaca S+R (see [Appendix 2](#)). The authors are grateful for the participation of the seven faculty, and thank them for their time and effort.

A professional transcription service transcribed the audio recordings of the interviews. The investigators anonymized the transcripts, and submitted them to Ithaca S+R as per the project protocol. The investigators performed close readings of the transcripts, and used

NVivo to assist with the analysis of the qualitative data, resulting in the formulation of core topic *Codes*. As key terms such *Codes* are italicized throughout (see [Appendix 1: Codes](#)).

The participants are full-time faculty who teach one or another of the core or required courses outlined above. A few teach some modest sized classes of between 25-35 students, most routinely teach class sizes of 40-50 students. A few routinely teach classes of 100-200 students in large lecture halls, as is common for core or required courses in structured programs like Business. All are experienced teachers who have taught at QC for several years or more. As a small yet valid sample, their voice may be representative of how Business is taught at QC.

3. SUMMARY OF FINDINGS

There are numerous Library support opportunities to investigate through further Library discussions within the department, with potential college partners, and with the Business faculty. These findings have not been constrained by human resource or physical resource considerations, despite a current period of college fiscal retrenchment. However, it is expected that additional resources would be essential if the Library were to pursue most, if not all, of these opportunities for improving Library services for Business teaching.

3.1 Faculty Self-reliance

Given their obvious commitment to effective teaching, all faculty expressed a general trait of *Self-reliance* in their approach to teaching, both in preparation and in actual practice. Such *Self-reliance* may be a natural characteristic for some, but for all it appears to be a required one for effective teaching at QC. Several expressed developing their *Self-reliance* at QC in the face of insufficient teaching supports, as per one faculty's pithy summation that the tradition at QC has been that "you're on your own."

The people faculty most often point to as supportive of their teaching are other faculty colleagues, usually in their department or program. Each department usually has one or two people to whom others turn for assistance with new teaching techniques, materials, or technologies, usually focusing on "what leads to effective teaching." Even without turning to a point person with a certain expertise, these faculty often discuss how they can teach better, since the general level of student preparedness has declined, and what employers want changes often, they are "constantly talking about...what we should teach...compare what we do."

3.2 Library Outreach on Current Supports

Several faculty did not know what support the Library could provide, besides Electronic Resources and Reserves, even if the Library routinely provides other kinds of supports to other departments. To outline the variety of supports the Library already offers, concentrated outreach to Business faculty should be considered, because as one faculty relates, the Library is "great," has "a lot of info," databases are "fantastic," but students and

faculty may not realize the following services, resources, personnel, and spaces the Library has available.

- **Clickers** are available for student borrowing.
- **Instruction** sessions can be taught by Library faculty in course classrooms, or in teaching labs located in the Library or in other buildings on campus.
- **Monographs** of quality scholarly books are purchased in Business subjects.
- **Research Guides** are routinely created for academic subjects or specific courses.
- **Research Services** are widely available to students and faculty, via chat, via email, via phone, and in-person.
- **Textbooks** can be purchased at faculty request and placed on Library Reserve.

3.3. Library Supports to Investigate

Besides Business faculty knowledge and skills, components of teaching can come from a *Publisher*, the *Center for Teaching and Learning (CTL)*, *Information Technology Services (ITS)*, and the Library. Supports from these areas are discussed more fully in the sections that follow, but the main takeaways in summary form can be grouped as follows.

- *Publisher* materials, including textbooks, online homework, and problem sets, are central to course learning, and Publisher customer support is strong and highly valued by faculty.
- *Center for Teaching and Learning* provides timely and proficient resources and human support for technology applications for teaching, and is highly valued by faculty.
- *Information Technology Services* could improve the maintenance of existing technology in classrooms and teaching labs, and increase the number of teaching spaces with upgraded or newer technology.
- **Library** support services can be investigated through further conversations with Business faculty and other relevant parties at QC. This report concludes that the following kinds of supports are worthy of further discussion.
 - **Events** in Library spaces for Career Readiness, Global Fluency, Panel Discussions on Current Affairs, Student Engagement
 - **Instruction** efforts expanded to include Advanced Software Skills, Business Research Skills, Course-Linked Research Assistance, Data Literacy Skills, Library Research Guides & Online Tutorials, Face-to-Face Tutorials

- **Personnel** knowledgeable in service to Business, such as social science librarians for Business support, graduate assistants for Business support
- **Promotion** campaigns to encourage Attendance and Study Effort, Open Educational Resources (OER), Reading and English Language Proficiency, Research and Writing, Trading Competition
- **Resources** to develop further, or to purchase anew, for Data Analysis Software, Data Sets, Financial Software Systems, Laptops, Library Electronic Resources, Monographs, OER, Problem Sets, QC Video Platform, Required Course Material, Textbooks
- **Spaces** for Teaching Labs, Data Analysis & Trading Lab, Study Spaces, Group Study and Tutorial Rooms

4. TEACHING FOUNDATIONS

If the Library is to discuss improving its services for Business it is necessary to understand the pedagogical background of how QC faculty teach their courses in Business.

4.1 Teaching Methods

Lecture and Discussion, Question and Answer, Flipped Class, Case Studies

The dominant teaching method in Business is *Lecture and Discussion*. Most faculty make frequent use of the *Question and Answer* method for in-class participation and learning. Three faculty have experimented with a *Flipped Class* approach whereby students watched short videos to learn how to solve problem sets in class. These tended to be courses with a mathematical component, such as those in economics, finance, investment, and statistics. Others use *Case Studies* to tackle specific course components in economics, law, or finance.

4.2 Curricular Goals & Examinations

Useful Knowledge, Career Preparation

Faculty affirm the need for course content to be *Useful Knowledge*. The students also have this expectation, since Business is a career-oriented field of undergraduate study. Faculty are much more mindful though of the level of mastery that students need to have if their Business education is to realistically result in *Career Preparation*. The fundamentals of any course, especially the core and required courses, are expected to consist of practical knowledge so that graduates can conduct successful interviews for competitive business positions.

Core Knowledge

As such, faculty expect that Business students will master the *Core Knowledge* in required and core courses especially, as well as in their major electives, in order to be well-prepared for their chosen business careers. Faculty section leaders are especially mindful that all faculty who teach one of the many sections of a given course (e. g. Macroeconomics) are teaching the same fundamentals, most often by using the same *Textbook*. Variation may come from teaching method, style, and tools, but the same *Core Knowledge* must be consistent from section to section. Given accreditation and certification requirements in several Business areas, as well as the expectations of today's business employers, faculty also try to achieve course parity, so that QC Business courses come close, if not match, the level of the same courses at peer institutions.

Midterm, Final, Prep Exam

Almost all faculty give traditional in-class *Midterm* and *Final* examinations. Although it is common in many college subjects for the *Midterm* to be used as a barometer of student performance, in Business this is especially the case. The amount of detailed information in the *Core Knowledge* students are expected to master, as well as the ability to apply mathematical skills to problem solving in many courses, means that students must be alerted in a semi-official way if their performance is unsatisfactory. The *Midterm* often serves as this documented notification that improvement is needed. Several faculty provide a *Prep Exam* experience, such as study guides or old exams, to assist students when studying for a *Midterm* or a *Final*.

Multiple-choice Questions, Essay Exam, Quiz, Certification Exam

Most faculty fashion their exams combining *Multiple-choice Questions* with short essays. At least one faculty routinely uses the *Essay Exam* as the preferred examination method, since *Writing* is considered to be an intrinsic part of the analytic and explanatory process in that course. The *Quiz* is most often used to ensure students keep up with *Textbook* and other required reading, and with in-class lectures. Such intermittent quizzes are usually conducted online, typically through the *Blackboard LMS*, and tend to be distinct from the publisher provided *Online Homework* that may routinely test *Textbook* knowledge. Lastly, some faculty teach *Core Knowledge* to prepare students to pass a *Certification Exam*, such as those for a Certified Public Accountant (CPA), or for a Chartered Financial Analyst (CFA).

Analytics Tools

The faculty are unfamiliar with the *Analytics Tools* they could potentially use to understand the effects of their teaching on student performance. Nevertheless, some express interest in learning more about prior student performance so they can better counsel poor performing students. They are most interested in determining whether poor grades are due to a past pattern of low performance, or to a current difficulty with specific knowledge and skills.

4.3 Teaching Tools: Overview

Blackboard LMS, Email

Most faculty use the *Blackboard LMS* (Learning Management System) as the course website to store materials and contact students. *Email* is frequently used for course announcements, and for individual student issues.

Computer, Projector, Classroom Response System (CRS)

All but one faculty make use of a *Computer* and *Projector* in the classroom. Some faculty work from their own laptop, while others hold class in a wired classroom or lecture hall that has a built-in desktop console with projection. The ostensible purpose of the *Computer* and *Projector* is to display *Slides* to students as accompaniment to the Lecture.

A few use clickers or cell phones as a *Classroom Response System (CRS)* to facilitate student engagement. Two faculty have tried using a *CRS*, a clicker device, with varying degrees of success, but they have yet to adopt such a tool consistently. One other faculty does make use of a *CRS* as a routine method to engage students in class. Given the ubiquity of cell phones carried by students it makes sense to put the devices to good use. Students download a *CRS* app and the faculty asks questions at regular intervals during class to prompt students' attention and gauge their comprehension. Asking five or six "real-time questions" every class enables everyone to answer, and the instructor gets "immediate feedback to know whether they are understanding or not."

Whiteboard, SMART Board

In the classroom, almost all faculty make use of the class writing board, whether it be a traditional blackboard written upon with chalk, or a *Whiteboard* for which markers are used. Despite the college's intention to replace every chalkboard with a *Whiteboard*, many of the former remain. As is common with faculty across campus, the *Whiteboard* is preferred, as one faculty says, "It's just a cleaner presentation. It's more colorful." In addition it is easier to revise numerical calculations or graphical representations on a *Whiteboard*. When erasing on a blackboard "some of the initial image is left behind, and it interferes with the presentation the second time," but on a *Whiteboard* "when you use the eraser, it gets rid of everything."

Some faculty use a *Projector* for *Slides* and also write on the *Whiteboard*, so having enough space to do both is important. Invariably an instructor needs to toggle back and forth between a projected image on the screen, and written explanations on the *Whiteboard*, "so a classroom that has both options is ideal" because "sometimes the screen covers some of the board." Few classrooms on campus are outfitted with a *SMART Board*, which provides both easy projection and the ability to write in the same space. Such a welcome technology one faculty has used to good effect if lucky enough to find one. The faculty finds them "great," "much more convenient than the standard system because you could just...use your finger to move things around...And you can write directly on the thing...in different colors and save the

result if you want.” Such an experience was “great” but it was “hard to get” a room with a SMART Board, so the instructor soon gave up trying. More often the college has installed classroom computers with SMART technology on them so the instructor can write on the monitor with a marker while projecting. No faculty mentioned using such SMART enhanced computers.

4.4 Teaching Tools: Current Supports

Information Technology Services (ITS)

Given the almost universal use of technology in teaching all faculty depend upon *Information Technology Services (ITS)* for classroom support. The *ITS* Help Desk is available to assist students and faculty, including for classroom technology problems, while some buildings have dedicated *ITS* personnel on site. Most often the issue is the general maintenance and currency of technology in classrooms and lecture halls within which Business faculty teach. Also, many of their classrooms are not technology equipped, meaning they do not already have a built-in desktop console with projection permanently installed. Those faculty must outfit the room themselves. One faculty describes it as a “bit of a hassle” to borrow the PC, cables, and clickers, set things up, and then return them when finished because it “takes time” and there is usually a “huge line of people” trying to get and return equipment. This can be more onerous if there are problems with a room, whether it be wiring not working correctly “on a regular basis,” or something “wrong with the connection at the wall.”

Some faculty teach in classrooms that are already outfitted with a built-in desktop console with projection. Nevertheless, experience has taught faculty to do pre-flight testing before they begin to teach, especially if trying something new with technology. One faculty makes “sure all the technology I have to use is working perfectly fine, so that on my first day of class, right out of the bat, I can start doing things.” When asked what the perfect classroom would be, another faculty relates the modest and realistic expectation, that it “would already have the computer there and you just show up and click” to get started. Rather than a *SMART Board*, or SMART technology on every computer, one faculty expresses the modest desires of all faculty when it comes to classroom technology.

To me smart just means a built-in computer...with a podium and a screen...And that you could just walk in with the thumb drive or go to the Cloud and get all that you need for that class and start right on the first minute...I think just having the existing technology be updated and available and reliable would be a major contribution.

Faculty receive *ITS* support but the service can be inconsistent. One faculty expresses the outlook of most.

IT support...which sometimes...you can get an answer. You know, maybe just walk over there and ask somebody. You don't always get an answer. It depends on what the question is...And I have not had that impression here that you had the responsiveness to technical things...There are people who try to help, but they're usually overburdened...And it's not clear who to call for what.

Center for Teaching and Learning (CTL)

When faculty need support for their teaching preparation the college office they seem to rely on most is the *Center for Teaching and Learning (CTL)*. *ITS* no longer provides in-person instruction on software (e. g. MS-Office). Instead students and faculty are now referred to Lynda.com (currently LinkedIn Learning) tutorials. This may suffice for becoming familiar with the routine functions of a software, but to make good use of something like *Blackboard LMS*, *CTL* provides face-to-face instruction for faculty, as one faculty mentions doing a “workshop through *CTL*” for developing “a fully online course.” Another made use of a Lynda.com webinar to learn some basics, but “it was not enough time for me to really understand how” *Blackboard Collaborate* works, so *CTL* “were very helpful” providing one-on-one human help for such an advanced feature.

CTL can also teach faculty other technology products they can use in their teaching, for instance, “how to do Google Pages,” finding such instruction to be “very helpful.” And, similar to the kind of personalized service that faculty receive from a *Publisher* representative, *CTL* personnel take the time to listen, instruct, and provide follow-up. When one faculty had a problem, *CTL* offered a solution that worked. Since they are “on top of things and ready there to help,” they followed up two weeks later, by making “a video so that other people can also see how to solve this problem on *Blackboard*.” In fact, the successful piloting of the *Trading Competition* for finance students has also occurred “in association with” *CTL*. These are some of the effective ways that *CTL* supports the teaching of Business at QC.

Library Electronic Reserves

Although the Library can support teaching in a variety of ways, the service most frequently referenced by faculty as being consistently helpful and dependable is *Library Electronic Reserves*. Like *Blackboard LMS*, *Library Electronic Reserves* has been available online for almost twenty years. *Library Electronic Reserves* connectivity and access has been reliable, but it took several years for *Blackboard LMS* to become equally so. Not all faculty use *Library Electronic Reserves*, but those who do are pleased, one stating the “reliable” service “has never failed me.” Faculty can place articles and other readings in digitized form on *Library Electronic Reserves*, as well as a printed *Textbook* on Reserve which can be accessed for physical loan by students. If an item is not owned by the Library then staff can purchase it at faculty request. One faculty mentions the need to use a video to teach a complex issue in class, and relates that the “library has been very supportive that I wanted a movie...so I’m very grateful to the library for that support.”

Some faculty rely not only on the *Library Electronic Reserves* system, but also on the “very helpful” staff to be ready and willing to assist them whenever needed, calling them “very good” at setting up course management. Although it is encouraging that *Library Electronic Reserves* provides important support for some faculty, what one faculty refers to as “the simple kind of things” for which “the library has been great,” there are other ways the Library can support Business faculty teaching as the sections that follow will show.

4.5 Teaching Tools: Library Supports to Investigate

Teaching Lab Space

Since Business faculty rely heavily on technology, investigate how Library teaching lab space can be increased to support Business and other social science teaching. As one faculty notes, it would be “good is if we had more computer labs or bigger computer labs, either in the library or somewhere else.” Make tactical use of the increased space to ameliorate the limitations imposed upon large and very large class sizes in Business. More Library teaching lab spaces could lead to modified teaching methods to incorporate more lab sessions into courses, such as occurs in other social science “jumbo” classes that juggle lectures and labs during the semester.

5. STUDENT OUTCOMES & CHALLENGES

5.1 Student Outcomes: Overview

Rote Understanding, Conceptual Understanding, Critical Thinking

Following on the faculty’s teaching goal of imparting *Core Knowledge*, students must exhibit two kinds of understanding in their course content to be successful, *Rote Understanding* and *Conceptual Understanding*. Both are learned foremost by diligent reading of the *Textbook* and by faithful in-class *Attendance*. The *Rote Understanding* of memorizing rudimentary Business definitions makes students familiar with the nomenclature of the business workplace.

Conceptual Understanding is the next level of Business knowing, and forms the nucleus of mastering any of the core Business subjects, as well as the specialties in each major, what one faculty calls “super basic concepts.” The concepts, principles, and theories of economics or finance or law need to be comprehended for a Business student to be able to “explain big concepts,” to express themselves well enough to “explain to somebody else some concept.” Such an ability will distinguish a given student “from somebody who hasn’t had the course.” Another faculty stresses how important understanding concepts is for job preparation. The instructor tries to “brainwash for the basic concept” of something, to prepare students for interviews at major financial companies like Goldman Sachs.

Conceptual Understanding is also a key component of both analysis and problem solving. Analysis is practiced through *Critical Thinking* about the issues affecting the business, economic, social, and political environment, as well as any specific business, economic, or financial situation. One faculty expresses well what many try to achieve, which is for students to develop critical thinking skills to see that “issues are not black and white...there’s a lot of grey.”

Problem Solving, Data Literacy, Programming

Critical Thinking is also taught as fundamental to *Problem Solving*, the applied work to understand a problem or issue, and then apply a logical model or mathematical formula to answer a question correctly, or to apply the “principles that we learn to various fact situations” in a given case.

Most faculty teach Business courses that contain data. The substance of *Problem Solving* is often data, so *Data Literacy* is yet another skill that Business students are expected to learn. This involves finding and collecting data online, whether through free or subscribed resources, and then knowing “how to analyze the data, formulate hypotheses, and interpret the results from the statistical analysis.” MS-Excel is the tool routinely taught for statistical analysis, but there is a new need in the Business world for students to learn *Programming* to use *Data Analysis Software*, sometimes Stata, but more frequently R, because the latter is free and open source. Faculty have learned this from “alumni...who come back to tell the Accounting Department you’re falling behind, or your students don’t know R.” Although Accounting majors might be the initial impetus for this, all Business students become the beneficiaries because R is increasingly taught in the required economics and statistics courses.

Research, Writing

Data Literacy and *Programming* are skills intrinsic to performing *Research* and *Writing* in Business. Most faculty require some form of Research to be conducted in courses that are not strictly of a mathematical or statistical nature. This varies from basic research for short case studies or for in-class presentations, to short- or medium- sized research papers based upon published articles properly cited. One faculty relates that the purpose of writing a five- to ten-page paper is to go through the “complete process,” to show a prospective employer the student knows how to do research on their own, “how to formulate a hypothesis, test the hypothesis, analyze the results, and present it to somebody in written format.”

More faculty placed emphasis on the *Research* part of *Research* and *Writing*, but a few also stressed that *Writing* clarity is at least as important as other modes of expression, and foundational for good Business communication and analysis. One faculty uses short focused essays to train students to understand a question and “write out the meaning of things,” because it’s part of the faculty’s job to make sure students “can actually express themselves.”

Collaboration, Global Fluency, Career Readiness Skills

Communication skills are intrinsic to *Collaboration* and *Global Fluency*, two skills particularly important to Corporate Finance and International Business majors. *Reading* and understanding current events is expected of all students for *Core Understanding* of Business issues and to develop a multicultural, if not, global perspective. Knowing how to connect and work with others to achieve goals are traits Business students are expected to cultivate. *Collaboration* with students from other universities, here and abroad, is especially prized by one faculty as a good method to develop *Global Fluency*. Students do online data collection,

present “within groups to each other online,” and at the end of the semester are introduced to university students in other countries, so “they connect, they work together, they discuss their data.”

In sum, most if not all of these skills can be said to be expected from a successful undergraduate studying any major. Nevertheless, they were specifically and repeatedly emphasized by this faculty as learning outcomes crucial to Business students who all need their college learning experience to be, whatever else it might do, job preparatory. All of the above comprise the package of *Career Readiness Skills* that most faculty push their students to acquire. Preparing Business students to perform well both on an interview and when starting a first Business position is an ongoing preoccupation of faculty. The postgraduate employment of Business students is an important measure of the success of the Business program.

5.2 Student Outcomes: Library Supports to Investigate

Career Events

Consider college-wide collaboration to foster *Career Readiness Skills*, by sponsoring workshops, seminars, events, such as resume creation, cover letter writing, interpersonal communication, mock interviews, etc.

Data Analysis Software

Try to coordinate subscriptions, links, tutorials to *Data Analysis Software*, such as Stata, R, etc.

Data Resources and Instruction

Consider resource and instructional support for *Data Literacy*, *Problem Solving*, and *Critical Thinking* through subscriptions to data sources and proprietary problem sets, through locating OER data and problem set alternatives, OER logic and critical thinking online tutorials, etc.

Global Programming

Target some public programming to increase student *Global Fluency*, through exposure to other geographies and cultures, through programming in art, film, lectures, author readings, panel discussions, etc.

Partnering for Tutorials & Small-Group Activities

Partner with CTL, The Writing Center, and others to see if *Research*, *Writing*, and *Collaboration* activities can be facilitated through creative use of Library Spaces, Library Instruction, and Library Electronic Resources to support student coursework, peer mentoring, etc.

Required Course Material

Discover a funding mechanism to provide access to all required course material, electronic and physical, to support *Rote Understanding* and *Conceptual Understanding*.

5.3 Student Challenges: Overview

Many QC Business students face numerous learning challenges, which in turn affects how Business faculty teach. To find out what kinds of supports can benefit Business teaching, it is important to have an understanding of the average QC Business student. Although all Business faculty note the incredible ability of the top QC Business students, an undetermined majority of students have challenges that make teaching and learning more difficult than it would be otherwise.

Attendance

Faculty almost universally reference that class *Attendance* is an issue. QC policy holds that *Attendance* cannot technically be required of students, and cannot technically be factored into grading. Instead, students are graded on class participation which can be required. Many students miss the importance of *Attendance* for understanding course material. One faculty takes *Attendance*, and can offer an approximation of the current trend that others allude to. *Attendance* is “an issue” and “is sporadic,” about 66% rather than an expected 80%. Other faculty focus on the lack of class participation for many students who do attend class. Students mistakenly expect that a kind of knowledge osmosis will occur by showing up. One faculty wants to practice *Critical Thinking* in discussing issues but is disappointed because often students “have a very passive way about being in class,” they “just want to come, be in class, and leave, so it's kind of hard” to engage them.

English Language Proficiency, Reading

Related to class participation is the difficulty many Business students have with *English Language Proficiency*. It affects a sizeable portion of Business students, as it does QC students overall. One faculty allows students to bring paper English dictionaries to exams, because “language wise” they struggle in understanding course concepts. The lack of *English Language Proficiency* is why some faculty use *Slides* to present course material, and provide copies of *Slides* for personal study. One faculty states this is needed because of the “huge amount of stuff, all kinds of documents” that are shown in class. The students are encouraged to bring copies of the *Slides* to class to make note taking easier, “so they don’t spend a lot of time just writing down the obvious.”

Faculty do not mention if *English Language Proficiency* is specifically related to students’ willingness to read course material, but the lack of *Reading* is a major impediment to Business students performing well. Many faculty note that students are not attentive to *Reading* the *Textbook* nor other course readings, that students “do not read”, or “do not like to read.” Students “don’t read anymore,” nor “look at information,” so their failure to even read *Slides* is an issue for many instructors. Unfortunately, many QC Business students do not see the central role that *Reading* plays in their college education.

Watching Videos

Most faculty try to address the challenge of student *Reading* by also using other methods, such as *Watching Videos*. Using *YouTube* to show recorded *Slides* or short documentaries, is almost universal because students “won’t read,” there’s much “less reading today than there once was,” but they “will watch videos.” However, when *Watching Videos* is a core activity, rather than supplementary, a similar inattention occurs. This may be why the *Flipped Classroom* method was tried by a few faculty but not adopted. Students were tested on required video content but many were not *Watching Videos* “five or seven minutes” long. Faculty observed online data that showed very low usage, “like nobody was watching the videos.” Somehow many students were unwilling to watch “engaging” videos to prepare for class, “to solve the doubts,” or “fine-tune” their knowledge. Evidence suggests that *Watching Videos* could work very well for students who did it because they were “much better prepared,” and their “grades were better.” Those who did not watch them had no preparation for class. Without lectures in the *Flipped Classroom* only the *Textbook* was left to them. In one telling, about 20% looked at neither the video nor the book for an assignment.

Study Effort

At least three of these four challenges – *Attendance*, *Reading*, and *Watching Videos* – can be grouped together under one rubric that could be called *Study Effort*. The pedagogical approach of incremental learning in Business is one that is shared with other social science and science programs, and consistent *Study Effort* is vital to such learning. The Business programs are structured so that *Core Knowledge* is learned from lower level courses through higher ones. Notwithstanding innate talent or prior college preparation, successful Business students must have the attribute of *Study Effort*. The lack of *Study Effort*, more than other learning challenges, troubles and perplexes all Business faculty, whether they call it “general ability” or “basic tools.” There is less student initiative to learn course material, and to attend office hours for help. Although there are still some very good students there is a “new mass of students” of lower quality that faculty express with “sadness” because of the recent “dramatic decrease in the level of students.” the past three to four years. Students do not internalize the idea of having “to prepare for class,” not wanting “to devote an hour before class to get ready.” Despite the varied methods that faculty use to impart knowledge to students, too many times the *Study Effort* is lacking, which results in less comprehension of course material and lower exam grades. Lastly, to illustrate that this is not just faculty quibbling, one faculty sums up the dedication to teaching Business students that all these faculty have.

I...obviously want to have smart students, but...I care more about having hard-working students...that care and that see the value in getting an education...I feel like some of my students...don't seem to understand that they are here to grow as people...To me, the biggest challenge is how to make students come out of my class knowing the things that they're supposed to know...I feel like I am not paid to teach. I am paid to make people learn. So I want people to learn. I don't want them to just come and hear my teaching. That's boring. I know my stuff...I want you to learn it.

5.4 Student Challenges: Library Supports to Investigate

It may help assess the effectiveness of the current supports Business receives if the Library understands better the learning challenges that exist for many Business students. When asked what more support could be offered for teaching, one faculty's reply may signal the heart of the matter. The "big mystery – is figuring out how to effectively teach students in an age where students do not like to read, where they just like to see videos." Combing faculty suggestions with some creative Library thinking, there are numerous potential support opportunities the Library might consider to help address student challenges.

Course-Linked Research Assistance

See if Library faculty subject specialists can provide virtual research assistance to support the use of *Library Electronic Resources* and Research Guides by having their email or chat links embedded in *Blackboard LMS* course sites. This could help provide "virtual communication through the library," by promoting "the availability of information" and the availability of a "resource person at the library" to whom students could ask questions and "find out quickly" the answers.

Graduate Assistants

Despite the large or very large classes in Business, the college usually does not provide teaching assistants. Investigate if the Library could partner with departments that have graduate programs (Library & Information Studies, History, Sociology, etc.) to provide graduate assistantships for teaching Advanced Software Skills or Data Literacy Skills.

Library Instruction Enhancement

Consider how to broaden and deepen the instruction that Library faculty provide by considering the desirability and practicality of teaching the following in various ways, both online and face-to-face (classroom, lab, workshop, small-group, one-to-one, tutorial).

- **Teach Advanced Software Skills** for MS-Office applications, because as one faculty states, faculty are "amazed how people don't know how to use Excel" so teaching "the ability to use software," Excel, PowerPoint, Word, etc., is needed.
- **Teach Data Literacy Skills** using Excel, R, Stata, etc., as one faculty suggests, "a one-on-one quick," or "a workshop," or "walk-in hours," any of which "might be more beneficial to students" than the lengthy Lynda.com online tutorials.
- **Teach Business Research Skills** more extensively, using *Library Electronic Resources*, as well as free web resources, including access to textual and statistical information, to ensure that students know "these are the resources for the BBA" and that "research librarians are there to help" with research questions when needed.

Library Labs & Laptops

Try to increase the availability of Library labs for *Watching Videos*, such as extended weekend and late night hours. Increase the availability of Library laptops for loan for *Watching Videos*.

Library Study Spaces

See how to promote Library spaces as the best places to study to foster *Study Effort*. Try to improve group study areas, maintain existing quiet areas, and create a pilot silent study area.

Promote Attendance, Study Effort, Reading

Consider launching an *Attendance* and *Study Effort* promotional campaign to encourage 'going to class' and 'studying in the Library' as good popular things to do. Try to promote *Reading* to improve comprehension and *English Language Proficiency*, through book displays, more current fiction and non-fiction, more graphic novels, bilingual texts, etc.

QC Instructional Video Repository

Continue support for existing *CTL* and *ITS* efforts to establish a QC Instructional Video Repository to foster easier access for *Watching Videos*. Research ways to provide instructional video content that would move beyond the use of individual *YouTube* video files to create a repository of instructional video content for Business and other students.

Social Science Librarians for Business Support

Attempt to expand and deepen Library faculty proficiency in providing business-related instructional and research support.

Student Engagement Events

Host greeting events for students to meet with alumni, prospective employers, business analysts, business scholars, etc., "but also for lectures, pictures, panel discussion" which would be a "good tool for the students" to put them "in contact with real people who are working on Wall Street," who "work in the financial industries," who are willing to come back to "connect with the current students." A faculty has coordinated a current events panel "where students post questions and have people from economics, political science, history and sociology" share disciplinary approaches to studying social issues.

6. TEACHING SOURCES

6.1 Teaching Sources: Overview

Syllabus, Textbook, Online Homework, Problems

All faculty provide a course *Syllabus*, and most faculty teach from a commercial *Textbook* that students must purchase so they can access the publisher's *Online Homework* module (e. g. Cengage, Macmillan, etc.). The *Online Homework* tests students' knowledge of various kinds of material using numerous methods. Some testing is for the comprehension of definitions or concepts and is done through quizzes. Other testing requires solving mathematical or analytical *Problems* that are tackled through problem sets. In courses with 50 or more students, *Online Homework* modules like Pearson's MyEconLab provide a "technology oriented" way for students to solve problems without the aid of a teaching assistant in a lab, so they "get what other schools are offering but in a different way." The *Online Homework* is

graded and is considered an intrinsic part of the *Textbook*-based, learning of course fundamentals. One faculty notes how easily students can access their course material and communicate with the instructor, because on the publisher site “they just have everything there,” with all the content in one place, and a mechanism to email the instructor “about anything.”

Slides, Pictures

Most faculty transcribe their lectures onto PowerPoint style *Slides* that are projected in class so students can follow them easily. A few faculty also mention their use of *Pictures* on their *Slides*, such as charts, tables, or graphs to present data, statistics, or mathematical formulae. Other times they use illustrations or cartoons to illustrate a concept more easily.

Faculty who use *Slides* consider them to be required reading, and important visual aids to class learning. These *Slides*, as representations of the spoken lectures, are considered to be the foundation, along with the *Textbook*, of a course’s *Core Knowledge*. So, most of them make the *Slides* available outside of class, usually as an electronic file located in *Blackboard LMS*. To support the *Textbook* reading, one faculty actually has the “class notes posted so that when they come to class they can just download the class notes and take notes on top of that so they don’t have to spend the whole time trying to catch up with what I’m writing on the board.”

YouTube

Some faculty go further in expanding access themselves, by allowing students to audio record the class session, or by recording their class *Slides* with the accompanying lecture audio. After buying a microphone for \$100, one faculty uses QC’s Google for Education and *YouTube* access to “just record the class and upload it,” finding that what students “liked most about the class was being able to review it later through the videos.”

Similarly, faculty routinely assign short documentaries through *YouTube* to better explain course content through visualization. One faculty provides such repetition for better learning outcomes in statistical problem solving. When using Stata the instructor is “recording all the keystrokes” being projected. Then the keystrokes are posted “on Blackboard at the end of the class, so that when the students go home and look over their notes, they can make the connection” and replicate what occurs in class.

6.2 Teaching Sources: Current Supports

Data Analysis Software, Financial Software Systems, Trading Competition

For faculty whose course content includes the regular consumption of data, *Data Analysis Software* (e. g. Stata, R, etc.) may be used to teach data analysis. Similarly, faculty teaching in the financial and investment areas may make use of *Financial Software Systems* (e. g. Bloomberg, ThomsonOne) outside the classroom to access real-time financial data in lab or other settings. In fact, one faculty uses TD Ameritrade to incorporate a *Trading Competition* of securities, using fake money, into the training of students in financial and investment

courses. The instructor thinks students “learn so much by trying to trade...that’s a valuable experience...not only necessary...in terms of knowledge” but also in terms of performing on job interviews where QC graduates can show “how they think,” and “how they apply concepts” because they have the trading experience. This faculty has created a website to host the *Trading Competition* results.

Publisher

All faculty mention *Publisher* support as intrinsic to their teaching. It is common for faculty to use the *Online Homework* modules that *Publisher's* provide. Invariably faculty face difficulties when managing the *Online Homework*. However, there is universal praise for the human support that each *Publisher* provides. Again, *Self-reliance* is the dominant faculty approach, and knowing the *Publisher's* help is available is usually enough support, as one faculty relates, “I’m pretty self-sufficient in general, so I don’t know that I would need anything that my publisher right now is not providing.”

Such support can extend beyond troubleshooting to teaching faculty something new, such as integrating *Publisher* quizzes into *Blackboard LMS*. One faculty even uses the *Publisher* online site for most things that a personal website or the *Blackboard LMS* would ordinarily do, because “Macmillan allows me to do everything,” so *Blackboard LMS* is only used for sending email. Moreover, the personalized support each *Publisher* provides is impressive, because “they have a rep assigned just to the teacher. So when I have a doubt, I just call my rep, and then he sorts me out.”

Such *Publisher* support also extends to vendors of other technology products, such as clickers. When asked who else helps with clicker technology the answer does not include any college support, “just the clicker rep.” When the faculty asks for a cheat sheet to solve a problem, instead “she sends me back a video showing” what to do. “And so it was impressive how somebody from afar could provide me with a visual response...one person with 20 students in the class, and she took the time out to create a video for me.” The level of personalized service the faculty received is notable. For another faculty, despite there being college technology support available, the go-to method is *Self-reliance* combined with *Publisher* support, because if “they don’t have it, then either I give up or find a different way of doing it.”

Library Electronic Resources

Faculty also depend upon *Library Electronic Resources* to assign newspaper, trade, or journal articles to students. Such articles are a valued method of explaining concepts or theories by way of current examples of real business world activity. One instructor in particular is “very pleased with the library resources,” being able to bring in recent news from the Wall Street Journal and the New York Times, being “extremely pleased with the digital subscriptions that the library has.” Another expresses a love for the Library databases and e-journals because “it’s so easy to get so much information” from the Library, “it’s tremendous.”

6.3 Teaching Sources: Library Supports to Investigate

There are several sources the Library can consider purchasing or subscribing to. To provide funding for such sources the Library might need to investigate creative ways to raise the funds: fundraising, grants, cost-sharing with other college offices, etc.

Data Analysis & Trading Lab

Investigate how to create a multipurpose space that can serve both data analysis and trading, to do teaching, research, and activities, for Business and other social science students. Consider making such a space in an existing or renovated area, where faculty can teach students how to analyze data or to trade, and students can work on data or trading projects, as well as the *Trading Competition*. Business faculty “for years” asked for a trading space, and have considered “the library would be an excellent place” for it.

Data Analysis Software

Provide easy access to R, and provide a site license for the most up-to-date *Excel* version, since often a “teacher wants the most recent version of *Excel* and asked the students to buy it.”

Financial Software Systems

Pursue creative funding to subscribe to any of the platforms that respected Business programs have at their university libraries, such as Wharton Research Data Service (WRDS), Center for Research in Security Prices (CRSP), S&P Capital IQ, Compustat, etc., to support “finance-type papers,” in research and honors classes, and to provide access to “basic national data that business schools have.”

Library Electronic Resources & Research Guides

Facilitate links to currently held Electronic Resources and Research Guides from *Blackboard LMS* course sites so students can access a “section with the news,” and “relate more to the library to get their daily information.” Have Library faculty subject specialists develop Research Guides to more fully support the primary areas of Business, as well as the core and required courses, “a page or a link where students can access all these different sites” so faculty can then “encourage them to enter that site and that link and use that information.”

Monographs

Pursue creative ways to increase the Library monograph budget for the purchase of scholarly Business books, whether ebooks or physical books, to aid in student research.

Textbooks

Try to purchase more online and physical *Textbooks* for Business courses. Partner with Business faculty to investigate if better publisher contracts can be established if the Library serves as a *Publisher* liaison to facilitate broader and cheaper access to *Online Homework* and other *Textbook*-based online learning modules. Investigate OER options for Business teaching. This will address the lament that “the textbook used to be in the library,” or “there was a time when the library was providing the entire book online so that you could actually get every chapter, print it out yourself...the library stopped doing that.”

7. CONCLUSION

The direct discussion with the QC Business faculty about how they teach has been an important first step for the Library to learn more about how it could better support their teaching needs. Such discussion has confirmed teaching experiences widely shared among social science and other faculty regarding student challenges with *Study Effort*. It has also confirmed the college's challenges to provide enough classrooms with built-in teaching technology, and sufficient *ITS* support for classroom technology maintenance, and upgrades.

The **Library** may consider how to prioritize the support investigations outlined in this report, since most, if not all, would entail additional human and financial resources.

- **Events** in Library spaces to foster Business student engagement and career readiness
- **Instruction** efforts to expand Library teaching of Business-related information and skills
- **Personnel** knowledgeable to teach Business-related information and skills
- **Promotion** efforts to address student challenges
- **Resources**, new or improved, for Business-related information content
- **Spaces** extended for all kinds of teaching, and new spaces for data & trading

Without expecting student, technology, and fiscal difficulties to disappear, this report can perhaps point to several ways that the challenges in the Business teaching experience can be ameliorated with enhanced support from the Library and potential partners, such as the *CTL*, The Writing Center, and others. The Library looks forward to using this report to investigate further how it can better support the teaching of Business at QC.

Appendix 1: Codes

Summary of Findings <i>Self-reliance</i>	
Teaching Methods <i>Case Studies</i> <i>Flipped Class</i> <i>Lecture and Discussion</i> <i>Question and Answer</i>	Student Outcomes <i>Career Readiness Skills</i> <i>Collaboration</i> <i>Conceptual Understanding</i> <i>Critical Thinking</i> <i>Data Literacy</i> <i>Global Fluency</i> <i>Problem Solving</i> <i>Programming</i> <i>Research</i> <i>Rote Understanding</i> <i>Writing</i>
Curricular Goals & Examinations <i>Analytic Tools</i> <i>Career Preparation</i> <i>Certification Exam</i> <i>Core Knowledge</i> <i>Essay Exam</i> <i>Final</i> <i>Midterm</i> <i>Multiple-choice Questions</i> <i>Prep Exam</i> <i>Quiz</i> <i>Useful Knowledge</i>	Student Challenges <i>Attendance</i> <i>English Language Proficiency</i> <i>Reading</i> <i>Study Effort</i> <i>Watching Videos</i>
Teaching Tools & Current Supports <i>Blackboard LMS</i> <i>Center for Teaching and Learning (CTL)</i> <i>Computer</i> <i>Classroom Response System (CRS)</i> <i>Email</i> <i>Information Technology Services (ITS)</i> <i>Library Electronic Reserves</i> <i>Projector</i> <i>SMART Board</i> <i>Whiteboard</i>	Teaching Sources & Current Supports <i>Data Analysis Software</i> <i>Financial Software Systems</i> <i>Library Electronic Resources</i> <i>Online Homework</i> <i>Pictures</i> <i>Problems</i> <i>Publisher</i> <i>Slides</i> <i>Syllabus</i> <i>Textbook</i> <i>Trading Competition</i> <i>YouTube</i>

Appendix 2: Semi-Structured Interview Guide (Ithaca S+R)

Background and Methods

1. Tell me about your experiences as a teacher [E.g. How long you've been teaching, what you typically teach, what you currently teach]
 - Does your teaching incorporate any particular teaching methods or approaches? [E.g. experiential learning, case method, design thinking, problem-based learning, flipped classroom]?
 - Have you received any support/relied on others towards developing your teaching approach?
 - Are there any other supports or resources that you think would be helpful for you?
2. Do you currently teach more general research or study skills in any of your courses? [E.g. finding sources, evaluating sources, data literacy, financial literacy, critical thinking]
 - How do you incorporate this into your courses? Have you experienced any challenges in doing so?
 - Does anyone support you in doing so and if so how? [E.g. instruction classes offered through the library]
 - Are there any other forms of support that would be helpful in doing this?

Working with Materials and Content

3. What materials do you typically create in the process of developing a course? [E.g. syllabi, course website, online modules, lectures, assignments, tests]
 - How do you make these materials available to students?
 - Do you make these materials more widely available? [E.g. public course website or personal website, sharing via listserv]
 - How you experienced any challenges in creating and/or making these materials available?
 - Do you ever consult with others as part of creating and/or making these materials available?
 - Are there any supports that could help you in creating and/or making these materials available?
4. Beyond the materials you create in the process of developing a course, what other kinds of content to students typically work with in your courses? [E.g. readings from textbooks or other sources, practice datasets, films]
 - How involved are you in how this content is selected and/or created?
 - How do you make these materials available to students?
 - Do you make these materials more widely available? [E.g. public course website or personal website, sharing via listserv]
 - How you experienced any challenges in selecting, creating and/or making these materials available?
 - Do you ever consult with others as part of selecting, creating and/or making these materials available?

- Are there any supports that could help you in selecting, creating and/or making these materials available?

Working with Tools

5. Have you considered using and/or are you currently working with data and/or analytics tools to understand and improve your teaching? [E.g. dashboard or an app through a course management system, early alert notification system on student performance via email]
 - If no, why? (e.g. unaware of such offerings, current offerings are not useful, opposed to such offerings)
 - If a tool could be designed that leverages data (e.g. about students) in a way that would be helpful towards your teaching, what data would feed into this and how would this tool ideally work?
 - Do you have any concerns in relation to how this data is collected and/or leveraged (e.g. privacy)?
 - If yes, what data and/or tools have you used and how? To what extent was this useful?
 - Do you have any concerns in relation to how this data is collected and/or leveraged (e.g. privacy)?
 - What are some of the greatest challenges you've encountered in the process of using these tools?
 - Do you rely on anyone to support you in using these tools?
 - Are there any other forms of support that would help you as you work with these tools?
6. Do you rely on any other tools to support your teaching (E.g. clickers, smart boards)? If so,
 - What are some of the greatest challenges you've encountered in the process of using these tools?
 - Do you rely on anyone to learn about and/or support you in using these tools?
 - Are there any other forms of support that would help you as you work with these tools?

Wrapping Up

7. If there was a magic wand that could help you with some aspect of your teaching [beyond giving you more money, time, or smarter students], what would you ask it to do for you?
8. Are there any ways that library or others on campus have helped you with your teaching in ways that have not yet come up in this interview?
9. Are there any issues relating to your experiences teaching that you think that librarians and/or others on campus who support you and your students should be aware of that have not yet come up in our discussion? [e.g. on the role of the library in supporting teaching, what makes teaching in your specific area of Business or Business more widely that warrants unique support]