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"Feels like you've hit the lottery": Assessing the implementation of a discovery layer tool at Ryerson University

Courtney Lundrigan, Kevin Manuel, and May Yan

Abstract

The research study was initiated to evaluate and assess the web-scale discovery (WSD) service Summon to coincide with its launch at Ryerson University Library in September 2011. The project utilized a mixed methods sequential explanatory strategy and applied an inductive analysis. Quantitative data was gathered with two online questionnaires, followed by a series of focus groups with students for the qualitative phase. The quantitative phase of the study collected over 6,200 survey responses (21% of the university population), with over 420 students indicating interest in participating in a qualitative followup (6.7% of the respondents). The survey data showed that most undergraduate students rated Summon highly in ease of use; however, there was a lower satisfaction with the large quantity of, and relevance of search results. Additionally, participants indicated that they used Summon in conjunction with other research tools, such as Google Scholar. In the qualitative phase, small focus groups, consisted of a total of 13 participants, allowed the students to express their experiences with Summon in depth. The study has given insight into the role of Summon in terms of undergraduate information-seeking behaviour. Participant feedback revealed potential improvements for Summon at Ryerson and will be useful to other institutions either using or considering the use of similar products. Overall, the results from the study will help to inform Ryerson Library practice surrounding future directions in reference, instruction, and service promotion.

Introduction

With the recent explosion of web-scale discovery (WSD) services in libraries, both users and library staff alike are adjusting their information seeking behaviors in response to these new tools. The evaluation and assessment of WSD services will increasingly become a priority to determine user satisfaction and value of investment. Assessing this return on investment of a WSD service in any library is a challenging task and would require the use of multiple avenues of study to evaluate its impact comprehensively. Upon implementing Summon¹ in September 2011, a team of three librarians at Ryerson University Library and Archives began an assessment project. Recognizing the various potential study foci - such as usage statistics, information literacy, usability, etc. - the investigators chose to evaluate user satisfaction to meet a gap in research literature.

To contextualize this study, Ryerson University's library serves a population of over 28,000 students, including about 2,300 graduate students, as well as 780 tenured and tenure track faculty and approximately 1,700 administrative and support staff. In addition, Ryerson boasts a growing distance and continuing education enrolment. Situated in the heart of downtown Toronto, the library is the only one serving the campus.

Given that the use of questionnaires is one of the preferred methods of gathering user feedback about electronic resources in libraries,² the investigators chose to conduct online surveys to gather quantitative data about user experience with Summon. Seeking feedback from the entire Ryerson

community, they designed an online questionnaire to be completed voluntarily. After receiving approval from the university's Research and Ethics Board, the team promoted and launched the surveys in October 2011.

Literature Review

WSD services are still new to many libraries, so researchers are only starting to publish library literature on tools such as Summon, EDS, primo etc. It was not surprising the research team found very little material in the initial literature review at the time of study planning. Using federated searching technology as a proxy for WSD services, researchers anticipated that the publication of library literature to follow in a similar fashion.

Using the five categories of federated searching literature from Way and Belliston, Howland & Roberts³, the research team placed the current state of Web Scale Discovery library literature into the following analogous categories⁴: (1) Comparisons of WSD products currently on the market to each other and/or to Google Scholar, (2) reports of specific WSD product implementations, (3) evaluation of the technical functionalities of products and how well WSD worked with and/or impacted other library systems or resources, (4) Usability and design of WSD and (5) articles examining librarians' and students' perceptions of and satisfaction with WSD products.

At the time of the study planning, published articles about web scale delivery focused on providing information to librarians who were in the decision making phase of discovery service acquisition. As such, most articles were about WSD product announcements, feature comparisons⁵, and implementations of various WSD products.⁶ These category 1 and 2 articles are regularly published as WSD products evolve, different institutions are implementing their WSD services, and they continue to be of general interest.

Early adopters of discovery layers shared their evaluation of the technical functions of Summon and how well it worked with, or impacted other library systems and resources. In "The Impact of Web Scale Discovery," Way reviewed Summon's impact on usage statistics, while Silton checked the linking to full text articles⁷, and Asher et al. compared searching between EDS and Summon. Many more researchers studied the usability of various WSD products, such as VueFind⁹, Ebsco EDS¹⁰, Summon¹¹, and WorldCat. Buck & Nichols, and Breeding explored furthering the design of future WSD products.

The investigators found only a small amount of library literature evaluating user satisfaction with using WSD in the context of their research. At that time, only three articles were noteworthy. In their discussion of their Summon implementation, Slaven et al. shared qualitative feedback from their users related to decisions. Dartmouth University Library summarized their user assessment results in an internal report¹⁵ at a high level by user groups. Finally, Howard & Wiebrands shared their survey of librarians and staff about their perceptions of Summon.¹⁶ Interestingly, Way had already identified that "studies are needed to examine why and how patrons are using these resources and how easily they are meeting their information needs."¹⁷ The research team designed this study to contribute to the latter category of literature, with the aim to discover user satisfaction in the context of their search.

Nearly a year after the initial literature review, other researchers have since contributed to this last category of research. Articles surveyed librarians using Summon and document the librarians' perceptions and their experiences with Summon concentrated on the impact of WSD to information

literacy instruction, or reference service delivery¹⁸ furthering the work of Howland & Wiebrands. In some of these papers, librarians shared feedback from and about their patrons and their satisfaction with using Summon. Cardwell et al., reported feedback from lower level, upper level and graduate students groups based on their instruction and reference sessions. Buck & Mellinger in their survey instrument, asked librarians to indicate the level of satisfaction of their patrons with using Summon.

Outside of librarians' observations or perceptions of user satisfaction, only a few publications have actually examined students' satisfaction with Summon using direct student feedback.¹⁹ Mussel & Croft presented the results of their satisfaction survey of distance education students.²⁰ Varnum only summarized a survey of library users of their Summon implementation, but did not elaborate on the composition of respondents. Outside of Summon no other WSD platform users have yet reported user satisfaction evaluation results of those systems. Ryerson's study is differentiated from some of the above studies in terms of scale and/or survey methodology as a both a qualitative and quantitative study and aims to fill this gap in the existing research on WSD.

Methodology

In this study, the central research questions gauged the user's ease of use and the level of satisfaction with Summon. The investigators implemented a multi-phased project that utilized a mixed methods sequential explanatory strategy. They then applied an inductive analysis that would reveal insight into the information seeking behaviour of the respondents.

The initial research design included two online questionnaires to be followed by a series of focus groups with students, thereby collecting both quantitative and qualitative data. Questionnaire participants would be self-selected from the Ryerson community and were not required to have previous experience with Summon or to be active library users. Participants would also had the option to volunteer for post-survey qualitative interviews when completing the questionnaire.

Survey Monkey Gold level was selected as the questionnaire tool as it provided the required online accessibility and analysis tools. The surveys drew from a participant pool that would consist of all Ryerson Library users, faculty, staff, students and other community members. Overall the goal of the surveys was to produce a representative sample²¹ of the Ryerson community and their user experience with Summon.

Phase one of the project was conducted in September and October 2011. A questionnaire with 10 openand closed-ended questions was created with the first five questions collecting demographic information such as enrollment and degree status, faculty, program and gender. The final five questions asked the respondent about their information search behaviour and awareness of Summon.

Posters promoting the questionnaire were placed around the campus and the team utilized the library's various social media outlets to solicit survey response. Using the library's news blog, a post linking to the questionnaire was published at the time of its launch and in the days leading up to the deadline for participation. The team also reached out to users via the Ryerson Library's Facebook page, which has 1,022 'likes,'22 and the library's Twitter feed, which has 1,197 followers.²³

Despite having offered an incentive of \$50 gift certificates from the Ryerson University Bookstore, the questionnaire drew only 191 responses, below the desired 400 participants to provide a more representative number of responses from the campus population.²⁴ Questionnaire participants were eligible for the draw for the incentives by voluntarily supplying their institutional email address. The survey was available from September 28, 2011 until the end of October 2011.

Overall, the main goal of the first survey was to create an awareness of Summon and to explore some of the initial feedback to inform the development of questions for the second survey. The results the first survey will be briefly noted here. 56% of respondents had used Summon while 74.7% indicated they planned to use it for their next search, whereas 10.6% would not use it again, and 14.7% were undecided.

For the second phase of the study, another questionnaire was developed in November 2011. Again, it was a combination of open- and closed-ended questions, but with 10-15 questions that were funneled based on the respondent's status and experience using Summon in their last academic research activity (see Appendix²⁵). Similar to the first questionnaire, the beginning of this survey collected demographic information such as gender, faculty, program, and enrollment and degree status. For the remainder of the survey, the questions asked respondents about their information search behavior in their last academic search assignment. More specifically, the investigators wanted to know if they used Summon, its ease of use, their satisfaction with the tool, and what other resources they use to search for academic information.

In an effort to draw a higher response rate in the second, more detailed questionnaire, the investigators offered a more substantial incentive of three iPads. As with the first questionnaire, respondents provided their institutional email address voluntarily in order to be eligible for the prize draw and only included students.

In addition to the social media outlets and poster distribution, the team used a campus-wide emailing system to reach potential respondents. The second questionnaire was available from November 4 – December 9, 2011. With the campus-wide email, distributed just days before the questionnaire's closure, the number of respondents viewing the survey jumped from a few hundred to 6,344!

Such a large number of responses to the second questionnaire may indicate that library users were more inclined to participate because of the more substantial prizes offered, in comparison with the first questionnaire. It should be noted though that 141 of 191 respondents (74%) provided their contact information for the first questionnaire, whereas 3,930 of 6,344 respondents (61%) provided their contact details for the second questionnaire. These numbers demonstrate that many survey participants were not solely motivated by the prize draws.

The second questionnaire provided the option for respondents to volunteer to participate in follow-up focus groups or interviews, and participants were selected from this pool of community members. In the second survey, 424 students indicated an interest to participate in focus groups which were conducted in February 2012 with 9 undergraduate and 4 graduate students. The turnout to the focus groups was much lower than expected but the timing of the scheduled sessions unknowingly coincided with some midterm exams.

In future evaluation and assessment projects, research teams should consider the use of campus-wide email systems to reach as many potential project participants as possible. While both questionnaires

yielded valuable information about user satisfaction with the WSD service at Ryerson, a higher volume of feedback was gathered from the second questionnaire and has been invaluable in moving the project forward.

Results and Discussion

The second survey collected 6344 responses with 6280 (99%) consenting and 64 (1%) declining to participate. 5363 (84.5%) respondents finished the survey. In terms of gender, the respondents were 59.2% (3238) female and 40.4% (2210) male, and the status distribution was 4861 (88.9%) undergraduates, 452 (8.3%) Masters students, 80 (1.5%) PhD students, 12 (0.2%) faculty, 53 (1%) staff and 10 (0.2%) research assistants. The percentage of student status responses was fairly reflective of the actual student status distribution at Ryerson. For enrollment, 4347 (81.8%) were full-time students, 858 (16.1%) were part-time students, and 111 (2.1%) were not students. The top three faculties that replied to the survey were the Ted Rogers School of Management (business) - 1517 (27.7%), Engineering, Architecture and Science - 991 (18.1%), and Community Services (health/medical) - 937 (17.1%).

The questionnaire asked the respondent to identify a recent assignment where they had to search for academic information and to use that scenario to answer the rest of the questionnaire. As for the breakdown of the assignments, 3776 (71%) of respondents were writing an essay, while 493 (9.3%) were writing an article/thesis, 373 (7%) were preparing for a presentation, 315 (5.9%) were preparing for a lab. 359 (6.8%) were working on other academic research (case studies, preparing for exams, etc.).

When assignment type was cross-tabulated by subject of search²⁶ (see Table 1), essay was predominant in nearly all subjects of search - Art and Design (75.9%), Business (71.6%), Communication (52.8%), Education (95.7%), Engineering (31.3%), Health/Medicine (82.5%), Humanities (92.6%), and Social Science (88.9%). Engineering's lower response were offset by the increase in research at 25% of responses²⁷, and working on a Lab (24.4%). Science respondents were the only respondent with another assignment type, working on a Lab (35.9%), ahead of essay (32%).

Assignment type/Subject of Search	Art & Design	Business	Communication	Education	Engineering	General	Health/Medicine	Humanities	Science	Social Science
Essay	75.9%	71.6 %	52.8%	95.7%	31.3%	53.3%	82.5%	92.6%	32.0%	88.9%
Presentation	9.7%	9.9 %	15.3%	1.7%	14.8%	13.3%	5.8%	3.1%	6.4%	3.0%
Research	11.2%	14.0 %	15.3%	1.7%	25.0%	26.7%	9.1%	3.3%	25.1%	6.7%
Lab Related	1.1%	2.0 %	15.3%	.0%	24.4%	.0%	1.2%	.9%	35.9%	1.0%

Exam Prep	.7%	.7%	.0%	.0%	1.5%	6.7%	.0%	.0%	.0%	.0%
Project	.7%	1.1 %	.4%	.0%	1.1%	.0%	.5%	.0%	.3%	.1%

Table 1 Assignment type by subject of search

Overall, the majority of undergraduate students were writing essays (74.4%), followed by research (8.8%), working on a lab (6.7%), preparing a presentation (6.6%). Project and exam preparation were less than 1% each.

When asked if they had used Summon to locate academic information, 3235 (60.9%) of respondents had used it while 2081 (39.1%) had not used it. 1028 participants skipped the guestion.

Summon Users

Respondents were asked how easy Summon was to use and 655 (20.5%) participants found it *extremely easy*, 1423 (44.6%) *very easy*, 946 (29.6%) *moderately easy*, 134 (4.2%) *slightly easy*, and 33 (1%) *not at all easy*. When filtered for just undergraduate students, the results were very similar with 19.89% finding it *extremely easy*, 44.66% *very easy*, 30.25% *moderately easy*, 4.36% *slightly easy*, and 0.84% *not at all easy*. Accordingly, these results produced a positively skewed curve.

In the next question, respondents were asked how easy it was to find resources when using Summon. 394 (12.4%) indicated it was *extremely easy*, 1119 (35.1%) *very easy*, 1290 (40.4%) *moderately easy*, 298 (9.3%) *slightly easy*, and 90 (2.8%) *not at all easy*. Cross-tabulating the variable ease of finding resources with student status revealed that within the undergraduate sample, 12.07% found it *extremely easy*, 35% *very easy*, 40.86% *moderately easy*, 9.46% *slightly easy*, and 2.62% *not at all easy*. Again, the responses produced a positively skewed curve of results.

Responses to the open-ended question²⁸ helped clarify some of the reasons for ease of finding resources' lower ratings. There were 1678 comments from users that rated ease of finding resources from moderately easy to not at all easy. 260 respondents left a negative²⁹ comment, 22 were directly related to a technical problem with document retrieval with the OpenURL resolver³⁰ or issues with full text access.

Some usability issues in the comments echoed the finding of Gross and Sheridan.³¹ For example, book reviews were confused with records of a book:

"about 50% of the search results were 1-page book reviews, not very helpful"

"Advanced Search to find what I need, since, if I don't, I end up with tons of reviews about the book/article I'm trying to find rather than the thing itself"

"[...]Dammit, I want books".

Students demonstrated difficulty understanding the differences between various formats of the information in the result set which was then exacerbated by some users' preference for one format over another either due to research style or habit:

"I found that it was a little difficult differentiating the types of sources these search results provided."

"When I want resources, I usually look for a specific type"

"I usually know what I'm looking for, that is, I know if it's a book or a journal".

Predominately, the negative comments were about the size of the result set for respondents' queries. Without knowing the actual keywords used, the investigators are unable to further determine if the volume of the information is from the nature of WSD searches or the use of vague keywords³² or other flawed search strategies.

In terms of satisfaction with Summon, 415 (13%) respondents were *extremely satisfied*, 1279 (40.1%) were *very satisfied*, 1147 (35.9%) were *moderately satisfied*, 272 (8.5%) were *slightly satisfied*, and 78 (2.4%) were *not at all satisfied*, producing another results curve that was positively skewed.

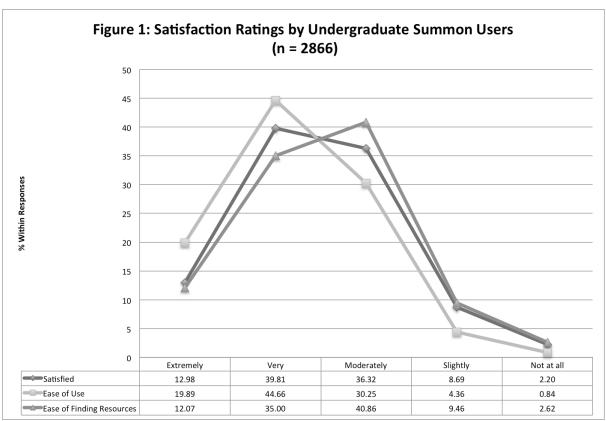


Figure 1 Satisfaction ratings by undergraduate Summon users

When just examining the undergraduate responses and satisfaction, 12.98% were *extremely satisfied*, 39.81% were *very satisfied*, 36.32 were *moderately satisfied*, 8.69% were *slightly satisfied*, and 2.2% were *not at all satisfied* (see Figure 1).

Compared with graduate responses, there was a very similar positively skewed curve, demonstrating a consistency in the satisfaction with Summon with the student respondents in general.

In Buck and Mellinger's survey of perceived satisfaction by librarians of undergraduates using Summon, the result was that 49% were satisfied.³³ In the Ryerson study, the undergraduates that were *very satisfied* and *extremely satisfied* made up of over 52% of the respondents. If including respondents that rated that they were even *moderately satisfied*, the numbers goes up significantly to 89% in both the undergraduate and the overall survey population.

While many users found the product very or extremely easy to use, their overall satisfaction level was less positively skewed. Such data indicates that participants did not confuse ease of use with satisfaction. For example, some indicated that Summon was extremely easy to use, but were only moderately satisfied with it. This may have been because it did not fully meet their research needs or they were more satisfied with another product. This may be one of the reasons the satisfaction ratings were lower than ease of use ratings as demonstrated in Figure 1.

As with many evaluation and assessment projects, the study conducted reflects a snapshot in time. While all of the feedback is valuable, the data collected is representative of user satisfaction with the product at a time when the service was relatively new at Ryerson and before Summon implemented Index-Enhanced Direct Linking. Serial Solution had indicated initially an average of 20% improvement to resources over link resolvers, ³⁴ this number is to increase over time as the vendor further enhances this feature. The resolution of technical problems may result in an increase in the ease of finding resources ratings.

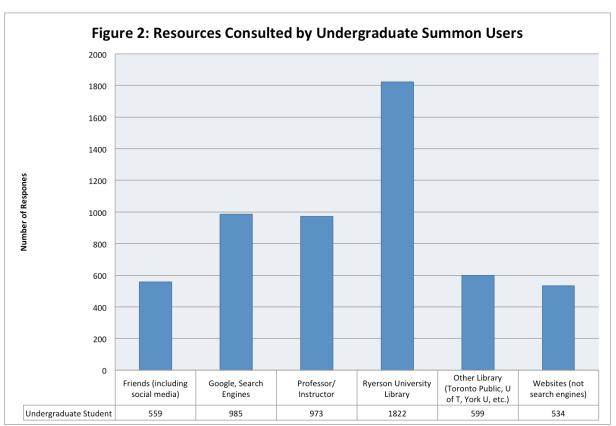


Figure 2 Resources consulted by undergraduate Summon users=

In a cross-tabulation of the type of resources that undergraduate students consulted in a search for academic information (see Figure 2), the results illustrated that 1822 used the Ryerson University Library, 985 searched Google or other search engines, 973 asked a professor or instructor, 599 used other libraries (public, other universities), 559 asked friends (including social media), and 534 used websites (not search engines). The respondent could select one or more of these options.

The Library was the predominant resource in the results for undergraduate students. Whether or not this high level of response was skewed because the respondents were influenced by answering a

Library-sourced survey is unknown. The value of an instructor's opinion was also of importance to students. Not surprisingly the use of Google and other search engines scored quite high as well. As Ryerson is located in the centre of large metropolitan area with two other universities, it is also not unexpected that a number or responses for the use of another library, either public or academic, is present. The use of friends as a resource to find academic information was evident, as well as the use of non-search engine websites.

The value of the instructor's endorsement was further highlighted by comments to open ended survey questionnaires and the focus group where both undergraduate and graduate students expressed the best way to increase use of Summon is by direct instruction in class. Students often will follow the direction of their instructor:

"If the professor tells me what to do, I just do it that way"

"The way I learned was through my professors"

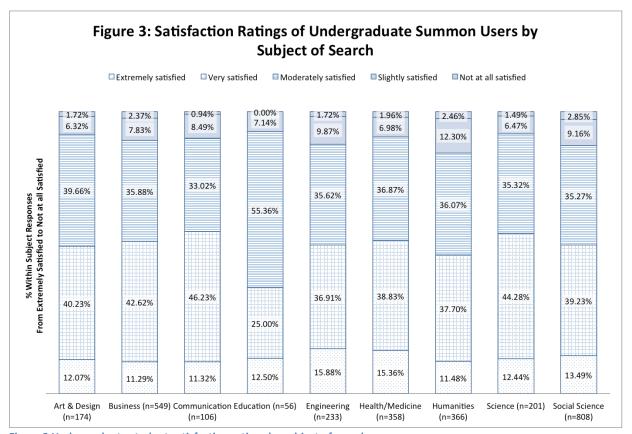


Figure 3 Undergraduate student satisfaction ratings by subject of search

When analysing the level of satisfaction amongst undergraduate students that has been cross-tabulated with the subject of the search, it revealed that most of the topics of research were very satisfied - at around 40% - with the Summon. The one exception was in the subject of education which had a lower very satisfied result at 25% and may be the result of a preference of using a particular database such as ERIC for their research (see Figure 5). Accordingly, there were a higher number of moderately satisfied with education as a subject search at 55.36% compared to the other subjects typically around 35%. Humanities as a subject search had the highest combined slightly satisfied and not at all satisfied at nearly 15% compared to 10% for most of the other subjects.

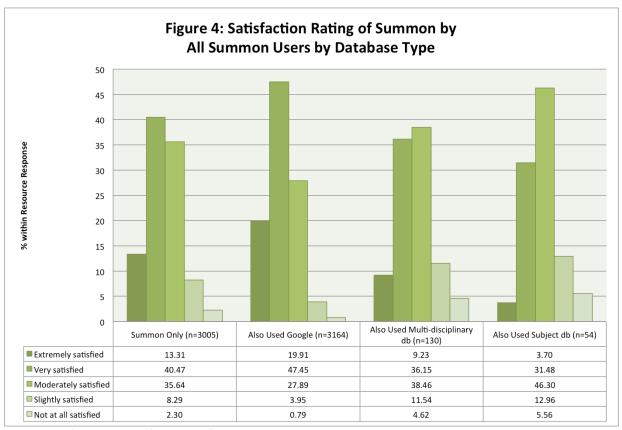


Figure 4 Satisfaction Rating of Summon of all users by database types used

In another cross-tabulation, a comparison was conducted using the satisfaction with Summon with other types of resources to find academic information (see Figure 4). When looking just at respondents who only used Summon, 13.31% were *extremely satisfied*, 40.47% were *very satisfied*, 35.64% were *moderately satisfied*, 8.29% were *slightly satisfied*, and 2.3% were *not at all satisfied*.

When thinking about the implementation of Summon, it was necessary to consider how other resources would compare such as databases or Google. The results from the survey illustrated that those respondents who had only used Summon had a very similar satisfaction rating to those who had also used Google or another multi-disciplinary databases. Accordingly, these results supported other evidence collected from the focus groups that Summon provided the 'Google-like' search experience and was responding to the research needs of the Library's users.

One anomaly that did come out of the results of satisfaction with Summon when compared to other resources was that those respondents who had also used subject specific databases gave a lower satisfaction rating than those who had used Google or other multi-disciplinary databases. Their responses did not present the same positive distribution. When conducting the focus groups, it was revealed in the session with graduate students that they had preferred using specific subject databases for their research rather than broader searching resources. It is therefore not surprising that these graduate students commented that the results from Summon were too general and broad for the purposes of their research needs. But they did recognize that it was a useful starting point for most undergraduate students. This type of a preference for subject specific databases may be the reason why users who also used subject specific databases rated Summon lower in satisfaction.

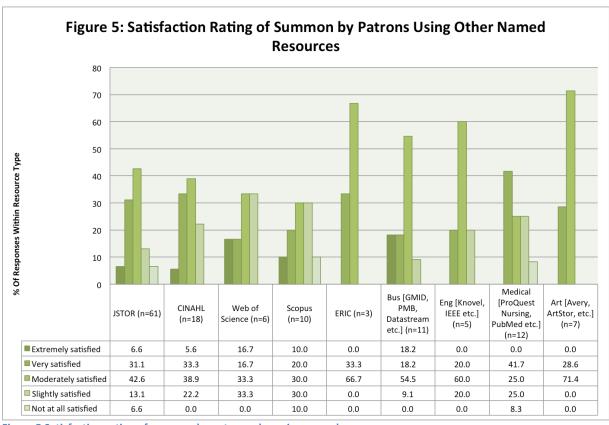


Figure 5 Satisfaction rating of summon by patrons also using named resources

Some interesting results came from the levels of satisfaction from users of resources other than Summon (see Figure 5). In particular, users of subject specific databases such as JSTOR, CINAHL and Medical (ProQuest Nursing, PubMed etc.) ranked Summon quite high, with well over 30% of respondents selecting very satisfied and higher. On the other hand, ERIC and art databases (Avery, ArtStor, etc.) had significantly lower satisfaction results in comparison, where most were only moderately satisfied at 66% and 71% respectively. These results reflect focus group findings that within certain fields of research there is a preference for select database resources. Given the low numbers of responses that mentioned specific databases, this information - while of interest - should not be considered to be statistically significant or representative.

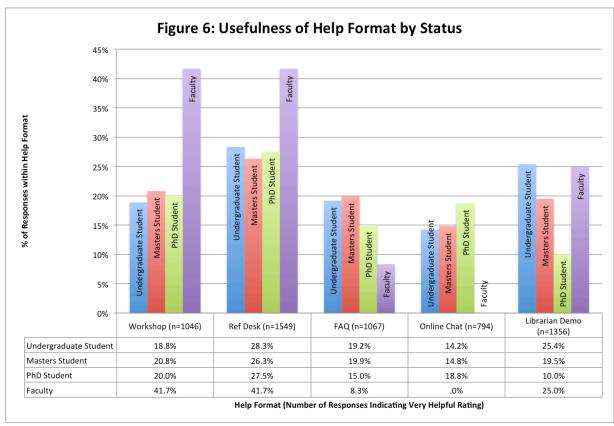


Figure 6 Usefulness of help formats by status

In addition to data collected about satisfaction and ease of use, the investigators asked for feedback about the respondents preferred method of getting help with the product (see Figure 6). Contrary to conclusions that users prefer self-serve help tools and digital interactions, the most popular amongst all user groups surveyed was to receive in-person help at the reference desk. Other preferred methods include librarian demonstrations in a classroom setting or a workshop, followed by FAQs and online chat services.

Non-Summon Users

Another question that produced some intriguing results when analyzed was comparing the types of resources by undergraduate respondents who had not used Summon (see Figure 7).

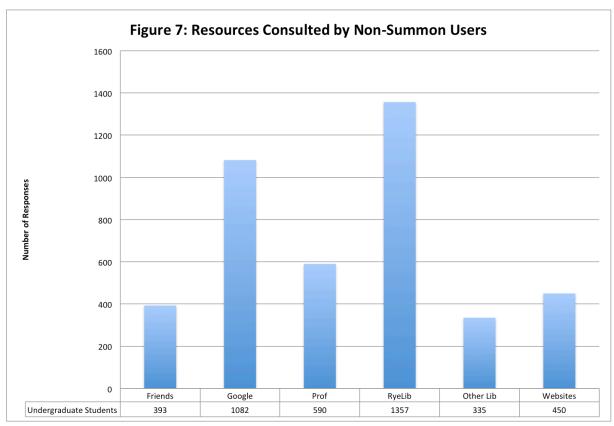


Figure 7 Resources consulted by undergraduate students that did not use summon

The majority, 1357, had used the Ryerson University Library, compared to 1082 that had used Google. 590 respondents had consulted their professors whereas 393 had asked friends about resources for academic information. As for the use of websites, there were 450 responses and 335 had used libraries, such as other universities or public. Table 2 presents the other named databases used by non-Summon Users in descending order.

Database Used	Number of Responses
Google and Other Search Engines	1082
ProQuest	49
JStor	26
Ebscohost	23
Other Medical (ProQuest Nursing, PubMed etc.)	21
Academic Search Premier	16
CINAHL	13
Other Business (GMID, PMB, DataStream etc.)	12
ERIC	8

Scopus	5
Other Engineering(Knovel, IEEE, etc.)	3
Other Art (Avery, ArtStor, etc.)	3
Web of Science	1

Table 2 Named Academic databases used by undergraduate non-Summon users

Conclusion

The current results indicate that many users were at least moderately satisfied with Summon. While this consistency demonstrates that the service is likely meeting the needs of the targeted undergraduate population, more research is required to draw a more comprehensive conclusion. Opportunities for further research are plentiful. They may include, but are not limited to, comparisons between users who used Summon versus those who used other academic searches, such as Google Scholar or particular databases. It may also be of interest to determine differences, if any, in satisfaction levels of various user groups. For example, were undergraduate students more satisfied with the service than graduate students or faculty members? Furthermore, there may be differences in satisfaction levels across academic disciplines worth exploring.

It would have been useful to have gathered data on how far participants were in their respective programs. While the undergraduate population was the targeted demographic for this study, having students self-identify if they were new students, at a midpoint in their programs, or even at an upper undergraduate level could have provided some perspective on the data collected. For example, students at a third- or fourth-year level had likely already become accustomed to consistently searching for academic research using specialized tools and therefore would not have found Summon to be satisfactory. This is especially true in cases of highly specialized databases, such as those relying on controlled vocabulary searches, as many WSD services are unable to search these tools in the prescribed manners.

The data collected from the second survey points to consistency in satisfaction for Ryerson Library's users and provides a springboard for further research. Although the results presented focus on the undergraduate experience, data was also collected from graduate students and will be presented in forthcoming publications. In addition, having survey respondents self-identify which area of study they are in provides another avenue for analysis and publication of results. Overall, the cross-tabulation of the data revealed only a few anomalies, but it painted a picture of consistency. Most respondents found the product easy to use and were moderately satisfied with the results returned in searching.

Looking ahead, the data collected can also be used to inform Ryerson library practices surrounding reference, instruction, the creation of online tutorials and instructional resources, as well as the placement and customization of resources on the library's website. Although the project's value is primarily as an assessment of WSD services provided by academic libraries, the benefits of gathering the data will be far-reaching in aspects of public service in the library.

Appendix

Search Everything Questionnaire

Introduction

You are being asked to voluntarily participate in a research study. This survey is designed to learn about your use of the *Search Everything* feature of the Ryerson University Library website. You should expect to be able to complete this questionnaire in 5-10 minutes.

Before you give your consent, please read the following information about your involvement.

*Questions with an asterisk means you must answer the question in order to proceed.

This survey is designed to identify your use and satisfaction of the *Search Everything* feature of the Ryerson University Library. All members of the Ryerson University community are eligible to participate in this questionnaire. Your choice of whether or not to participate will not influence your future relations with Ryerson University.

The questionnaire used in this study is not experimental in nature. The only experimental aspect of this study is the gathering of information for the purpose of analysis. All individual responses will remain confidential and only available to the investigators. Aggregated responses will be released through presentations and publications that are produced by investigators. Your responses are made anonymous from the collection of identifying data used in participating in the incentive (draw). We will **not** link your email or IP address to the survey responses unless you express interest in participating in future focus groups or interviews.

Should you feel uncomfortable answering any of the questions presented in this survey, you may stop your participation at any time by using the option to "Exit the Survey", effectively withdrawing your consent to participate. (You can also close this web browser to exit the survey.)

Ryerson library will benefit from the results of this study in the evaluation of the use of the Search Everything tool. You, as a participant will have no direct benefit from your participation outside of an increase in awareness of available resources.

Study investigators are Ryerson University librarians, Kevin Manuel (x2868), Graham McCarthy (x2119), Courtney Lundrigan (x4093) and May Yan (x5146). If you have any questions about your participation in this study, please contact Kevin Manuel.

To thank you for your participation, at the end of the survey, you may enter your Ryerson email address to be eligible for a draw. We will issue three (3) prizes of an Apple iPad 2 (16GB Wi-Fi model in your choice of Black or White, with any colour polyurethane cover). While we welcome all to answer this survey, only eligible participants with valid Ryerson email addresses will be eligible to enter the incentive draw. RFA and Library staff are not eligible to enter.

Answering yes to the question below indicates that you have read the information in this

agreement and agree with the above terms.

*Do you consent to participate in the study?

- o Yes
- o No

Search Everything

Search Everything is a new search tool that will let you access the majority of the Library's resources (online and print) with a single search right from the library homepage.

With an easy to use single search box, *Search Everything* helps you locate relevant information in much less time by searching across the library's resources in one place. Use *Search Everything* to look for books, journal articles, databases, newspaper articles, e-books, dissertations, institutional repositories, conference proceedings, cited references, reports, digital library, and more.

The following is a screenshot of the Ryerson University Library Website highlighting the Search Everything tool in red.



*1a. The library has a number of resources to help you get familiar with using *Search Everything*, please indicate if you used any of the following to learn about Search Everything:

- Research Skills Workshops
- FAQ
- Reference Desk
- Ask Us online chat

- Librarian Demonstrated Search Everything in class
- N/A; Did not use

*1b. Please rate the resources in helping you understand how to use Search Everything.

	1 - Not at all	2 - Somewhat	3 - Very useful	N/A
Research Skills Workshops	0	0	0	0
FAQ	0	0	0	0
Reference Desk	0	0	0	0
Ask Us online chat	0	0	0	0
Librarian Demonstrated Search Everything in class	0	0	0	0

Who you are

*2a. What is your gender?

- o Male
- o Female
- o Other

*2b. What faculty are you in?

- o Faculty of Arts
- o Ted Rogers School of Management
- o Faculty of Communication & Design
- Faculty of Community Services
- o Faculty of Engineering, Architecture and Science
- Yeates School Graduate Studies
- Continuing Education
- Not Applicable

*2c. Which program are you in?

[Text box]

*2d. Which of the following best describe your current status with Ryerson University?

- O Undergraduate Student
- Masters Student
- o PhD Student
- o Faculty
- o Staff
- Research Assistant

Students - CE, Undergraduate & Graduate

*3a. If you are a student, what is your enrollment status?

- o Full Time Program
- Part Time Program
- Not Applicable

Please think of a recent time when you had to search for academic information as an example. Use this example in answering the following questions.

*3b. What type of assignment were you completing when you were searching for academic information?

- Writing essay
- Writing Article/thesis
- Preparing for Lab
- Preparing for Presentation
- Other (please describe)

*3c. Please indicate the subject of this search? Choose from the drop down list, and if not found, enter the other subject in the textbox below.

Accounting

Aerospace Engineering

Architecture

Arts and Contemporary Studies

Biology

Biomedical Engineering

Biomedical Physics

Business Management

Business, Administrative and Labour Law

Gerontology

Canadian Law

Caribbean Studies

Chemical Engineering

Chemistry & Chemical Engineering

Child & Youth Care

Civil Engineering

Communication and Culture

Community Development

Computer Science

Criminal Justice

Dance

Disability Studies

Early Childhood Education

Economics

Electrical Engineering

English

Environmental Studies

Fashion

Finance and Investment

French

Nutrition and Food

Geography

Graphic Communications Management

Health Services Management

History

Hospitality and Tourism

Human Resources Management

Image Arts

Immigration and Settlement

Industrial Engineering

Information Technology Management

Interior Design

International Business and Economics

Journalism

Law, Canadian

Market Research

Mathematics

Mechanical Engineering

Midwifery & Childbirth

Molecular Science

Music

Nursing

Occupational Health and Safety

Philosophy

Physics

Physiotherapy

Politics

Professional Communication

Psychology

Public Health

Public Policy and Administration

Public Relations

Radio & Television Arts

Retail Management

Social Work

Sociology

Spanish

Spatial Analysis

Theatre

Urban & Regional Planning

Women's Studies

Other (please specify in space below)

[text box]

^{*3}d. Did you use Search Everything in searching for academic information?

- o Yes
- o No

Students - Used Search Everything

*4a. How easy is Search Everything to use?

o Extremely easy o Very eas	o Moderately easy	 Slightly easy 	O Not at all easy
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*4b. How easy is it to find resources you need using Search Everything?

0	Extremely easy	0	Very easy	0	Moderately easy	0	Slightly easy	0	Not at all easy
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*4c. How satisfied are you with using Search Everything?

 Extremely 	o Very	 Moderately 	 Slightly 	Not at all
satisfied	satisfied	satisfied	satisfied	satisfied

4d. Is there anything you'd like to share about your experience with *Search Everything*? [text box]

4e. Did you use any other resources in your academic search? [Click on as many as applicable.]

- Friends (including social media)
- Web Search Engine (Google, Bing, etc.)
- Professor/Instructor
- Ryerson University Library
- Other Library (Toronto Public, U of T, York U, etc.)
- Websites (not search engines)
- Other Academic Databases (please specify)

*4f. As a follow up to this questionnaire, we are looking for volunteers who are interested in being a part of focus groups to talk about your experiences with *Search Everything*. Please answer if you would be interested in being a part of this focus group? [Note that only if you choose to participate will your answers be associated with your email address. Separately at the end of this survey is the opportunity to enter for the prize draw. Answering No to this question will not affect your chances at the prize draw.]

- o Yes
- o No

Students - Did not use Search Everything

*4b. Which resources did you use in your academic search? [Click on as many as applicable.]

- Friends (including social media)
- Web Search Engine (Google, Bing, etc.)
- Professor/Instructor
- Ryerson University Library

- Other Library (Toronto Public, U of T, York U, etc.)
- Websites (not search engines)
- Other Academic Databases (please specify)

4c. The library has a number of resources to help you get familiar with using *Search Everything*, please indicate if any of the following might increase your interest in using *Search Everything* [Click on as many as applicable.]

- Research Skills Workshops
- FAQ
- Reference Desk
- Ask Us online chat
- Librarian Demonstrated Search Everything in class

4d. Is there anything you'd like to share about your experience with *Search Everything*? [text box]

*4e. As a follow up to this questionnaire, we are looking for volunteers who are interested in being a part of focus groups to talk about your experiences with *Search Everything*. Please answer if you would be interested in being a part of this focus group? [Note that only if you choose to participate will your answers be associated with your email address. Separately at the end of this survey is the opportunity to enter for the prize draw. Answering No to this question will not affect your chances at the prize draw.]

- o Yes
- o No

Notes

¹ Ryerson University Library re-branded Summon as 'Search Everything' on its Library homepage.

² Marie Kennedy, "What are we really doing to market electronic resources?" *Library Management*, 32, 3 (2011), 144.

³ Doug Way. "The Impact of Web-Scale Discovery on the use of a Library Collection," *Serials Review* 36, no. 4 (2010), 215.

⁴ Ibid., 215. Way uses the following five categories to discuss the literature of federated searching: "(1) Discussions of the desirability and/or difficulty of creating a robust federated search tool, (2) reports on one or more specific federated search implementations, (3) comparisons of federated search products currently on the market to each other and/or to Google Scholar, [and] (4) views on how to implement a subject-specific federated searching tool." Way cites Belliston, Howland, and Roberts' four categories of federated searching literature as the underpinning of his categorization, along with "a fifth category of articles examines librarians and end-users' perceptions of and satisfaction with federated searching." Ibid., 215. See also C. Jeffrey Belliston, Jared L. Howland, and Brian C. Roberts, "Undergraduate Use of Federated Searching: A Survey of Preferences and Perceptions of Value-added Functionality," *College and Research Libraries* 68, no. 6 (November 2007), 474.

⁵ Jason Vaughan, "Serials Solutions Summon," *Library Technology Reports* 47, no. 1 (2011), 22-29,2; Jason Vaughan, "Web Scale Discovery: What and Why?" Library Technology Reports 47, no. 1 (2011), 5; Ronda Rowe, "Web-Scale Discovery: A Review of Summon, EBSCO Discovery Service, and WorldCat Local," The Charleston Advisor 12, no. 1 (2010), 5-10; Athena Hoeppner, "The Ins and Outs of Evaluating Web-Scale Discovery Services," Computers in Libraries 32, no. 3 (04, 2012), 6-40; Chris Keene, "Discovery Services: Next Generation of Searching Scholarly Information," Serials 24, no. 2 (2011), 193; Helen Timpson and Gemma Sansom, "A Student Perspective on E-Resource Discovery: Has the Google Factor Changed Publisher Platform Searching Forever?" Serials Librarian 61, no. 2 (Aug, 2011), 253-266. ⁶ Alison Sharman and Eileen Hiller, "Implementation of SUMMON at the University of Huddersfield," SCONUL Focus, no. 51 (Spring 2011), 50-52; Michael Klein, "Hacking Summon," Code4Lib Journal, no. 11 (2010); Jason Vaughan, "Investigations into Library Web-Scale Discovery Services," Information Technology & Libraries 31, no. 1 (2012), 32-82; Cathy Slaven et al., "From "I Hate it" to "it's My New Best Friend!": Making Heads Or Tails of Client Feedback to Improve our New Quick Find Discovery Service" (ALIA Information Online Conference, Australian Library and Information Association, Sydney, New South Wales, Australia, 2011); Nara L. Newcomer, "The Detail Behind Web-Scale: Selecting and Configuring Web-Scale Discovery Tools to Meet Music Information Retrieval Needs," Music Reference Services Quarterly 14, no. 3 (2011), 131-145; Valeri Craigle, "Discovery Layers in Law Libraries A Progress Report on how our Institutions are Implementing this New Technology," AALL Spectrum 16, no. 3 (12, 2011), 7-9; Tonia Graves and Angela Dresselhaus, "One Academic Library—One Year of Web-Scale Discovery," Serials Librarian 62, no. 1-4 (Jan, 2012), 169-175; David Rapp, "Discovery at Dartmouth," http://www.thedigitalshift.com/2012/02/digital-libraries/discovery-at-dartmouth/ (accessed June 29, 2012).

⁷ May Yan and Kate Silton, "If you Build it, Will They Come?" (Presentation, Electronic Resources & Libraries, Austin, TX, April 4, 2012).

⁸ Asher, Andrew D., Lynda M. Duke, and Suzanne Wilson. "Paths of Discovery: Comparing the Search Effectiveness of EBSCO Discovery Service, Summon, Google Scholar, and Conventional Library

Resources." *College & Research Libraries* (forthcoming). Published electronically at http://crl.acrl.org/content/early/2012/05/07/crl-374.full.pdf+html.

- ⁹ William Denton and Sarah J. Coysh, "Usability Testing of VuFind at an Academic Library," *Library Hi Tech* 29, no. 2 (2011), 301-319.
- ¹⁰ Sarah C. Williams and Anita K. Foster, "Promise Fulfilled? An EBSCO Discovery Service Usability Study," *Journal of Web Librarianship* 5, no. 3 (2011), 179-198.
- ¹¹ Helena Luca, "KonSearch Usability Study: Evaluation of the New Literature Search Engine of the University of Konstanz," (2011); Julia Gross and Lutie Sheridan, "Web Scale Discovery: The User Experience," *New Library World* 112, no. 5 (2011), 236-247.
- ¹² Melissa Becher and Kari Schmidt, "Taking Discovery Systems for a Test Drive," *Journal of Web Librarianship* 5, no. 3 (2011), 199-219.
- ¹³ Stefanie Buck and Jane Nichols, "Beyond the Search Box," *Reference & User Services Quarterly* 51, no. 3 (Spring 2012), 235-245.
- ¹⁴ Marshall Breeding, "Looking Forward to the Next Generation of Discovery Services," *Computers in Libraries* 32, no. 2 (2012), 28-31.
- ¹⁵ Dartmouth College Library, An Evaluation of Serials Solutions Summon, 2009.
- ¹⁶ Howard, David and Constance Wiebrands. "Culture Shock: Librarians' Response to Web Scale Search." ALIA Information Online Conference, Australian Library and Information Association, Sydney, New South Wales, Australia, 2011.
- ¹⁷ Way, "The Impact of Web-Scale Discovery," 219,
- ¹⁸ Catherine Cardwell, Vera Lux, and Robert J. Snyder, "Beyond Simple, Easy, and Fast," *College & Research Libraries News* 73, no. 6 (June 2012), 344-347; Stefanie Buck and Margaret Mellinger, "The Impact of Serial Solutions' Summon™ on Information Literacy Instruction: Librarian Perceptions," *Internet Reference Services Quarterly* 16, no. 4 (October 2011), 159-181.
- ¹⁹ Rosie Croft and Jessica Mussell, "Discovery Layers and the Distance Student: The Online Search Habits of Students," *Journal of Library and Information Services in Distance Learning* (forthcoming), published electronically at

http://dspace.royalroads.ca/docs/bitstream/handle/10170/471/Mussell_Croft_Discovery_Layers.pdf?sequence=3; Slaven et al., "From 'I Hate it' to 'It's My New Best Friend!': Making Heads Or Tails of Client Feedback to Improve our New Quick Find Discovery Service"; Varnum, "Serials Solutions' Summon: Familiarity Breeds Success," 18.

- ²⁰ Ryerson also has a significant distance education community as part of the Change School of Continuing Education, but as they were not a focus of this study, distance education users were not asked to self-identify.
- ²¹ "representativeness" *A Dictionary of Sociology*. John Scott and Gordon Marshall. Oxford University Press 2009. *Oxford Reference Online*. Oxford University Press.
- ²² Current, as of August 10, 2012.
- ²³ Current, as of August 10, 2012.
- ²⁴ Statistics Canada, *Introduction to Basic Statistics* (Toronto: Statistics Canada Advisory Services, 2010).
- ²⁵ A shortened survey instrument is presented in the appendix showing the questions that students answered. Faculty/Staff/Researcher Assistant questionnaires are omitted here for brevity.
- ²⁶ Researchers coded the various subjects presented by the respondents from the drop down selection list and write in subjects into the following 10 subject categories to better organize the responses for analysis.
- ²⁷ Graduate Students made up of 27.29% of the Engineering subject respondents.
- ²⁸ Question 4d (Is there anything you'd like to share about your experience with Summon?)
- ²⁹ Comments were coded into the following categories: Positive, Neutral and Negative.

³⁰ Ryerson's link resolver SFX was struggling at the time to link to the new ProQuest platform. Comments such as "Links to ProQuest do not work" is an example from one "slightly easy" rating for ease of finding resource rating.

³¹ Julia Gross and Lutie Sheridan, "Web Scale Discovery: The User Experience," *New Library World* 112, no. 5 (2011), 236-247.

³² Ibid.

³³ Sum of Satisfied and Very Satisfied ratings from Table 5 in Stefanie Buck and Margaret Mellinger, "The Impact of Serial Solutions' Summon™ on Information Literacy Instruction: Librarian Perceptions," *Internet Reference Services Quarterly* 16, no. 4 (2011), 159-181.

³⁴ Andrew Nagy (Market Manager, Discovery Services, Serials Solutions), email to Summon Clients, November 11, 2011.