AN ANALYSIS OF DIRECT RECIPROCAL BORROWING AMONG CREPUQ LIBRARIES

Joanna Duy, Associate Librarian, Concordia University Libraries

Vincent Larivière, Professeur Adjoint, ÉBSI, Université de Montréal
INTRODUCTION

Spectrum of Resource Sharing:

Higher cost

Interlibrary Loan
• ILL system
• ILL staff

Consortial Shared catalogue
• circulation system
• circulation staff

Lower cost

Direct Reciprocal Borrowing
RESEARCH QUESTIONS

- How much resource sharing activity is there within CREPUQ (ILL and direct reciprocal borrowing)? What is the ratio of ILL to direct reciprocal borrowing?

- Is the amount of direct reciprocal borrowing activity related to the size of the library’s collection, student size, or physical distance from other libraries?

- What can social network analysis tell us about direct reciprocal borrowing within CREPUQ?
METHODS

- Direct Reciprocal Borrowing
- Total Circulation
- FTE students
- Collection size (physical)

- CREPUQs Statistiques générales des bibliothèques universitaires québécoises (2005-10);
  Tables 24, 20, 4, 14

- CREPUQ ILL –COLOMBO Statistiques Annuelles (2007-10)

- Distances between institutions – Google Maps

- Analysis: Excel, SPSS, UCInet and NetDraw
RESULTS: GENERAL OBSERVATIONS

Montréal institutions account for 91% of the traffic in reciprocal borrowing, 67% of the traffic for total circulation.

*Some institutions are missing data for certain years.
Montréal CREPUQ Libraries' Resource Sharing Activity 2007-10 (Borrowing + Lending)

- Recip. Borrowing: 86%
- ILL: 14%

Non-Montréal CREPUQ Libraries' Resource Sharing Activity 2007-10 (Borrowing + Lending)

- Recip. Borrowing: 36%
- ILL: 64%

Significant cost savings
Example: Concordia users borrowed on average (05-10) 15,361 items from other CREPUQ libraries through direct reciprocal borrowing (we lent over 17,272 items)

TELUQ and INRS were not included in either category due to their multi-campus/online nature.
Significant positive correlations were observed between total items borrowed and loaned through direct reciprocal borrowing and:

- Number of FTE students
- Library’s collection size (physical materials)
The total amount of borrowing and lending done between CREPUQ institutions between 2005-10 was averaged and plotted in relation to the distance in kilometers between the two institutions.

<table>
<thead>
<tr>
<th>Institution 1</th>
<th>Institution 2</th>
<th>Distance (KM)</th>
<th>Borrowing + Lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concordia</td>
<td>McGill</td>
<td>1,4</td>
<td>17455,6</td>
</tr>
<tr>
<td>Concordia</td>
<td>UdeM</td>
<td>4,3</td>
<td>7688,2</td>
</tr>
<tr>
<td>Concordia</td>
<td>HEC</td>
<td>4,5</td>
<td>476,8</td>
</tr>
<tr>
<td>Concordia</td>
<td>Poly</td>
<td>4,3</td>
<td>971,8</td>
</tr>
<tr>
<td>Concordia</td>
<td>Sherb</td>
<td>151</td>
<td>722,8</td>
</tr>
<tr>
<td>Concordia</td>
<td>Laval</td>
<td>247</td>
<td>322,6</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQAC</td>
<td>458</td>
<td>2,6</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQAM</td>
<td>2,5</td>
<td>4633,3</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQAR</td>
<td>542</td>
<td>0,4</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQAT</td>
<td>628</td>
<td>36,3</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQO</td>
<td>202</td>
<td>67,5</td>
</tr>
<tr>
<td>Concordia</td>
<td>UQTR</td>
<td>139</td>
<td>9,0</td>
</tr>
<tr>
<td>Concordia</td>
<td>ENAP</td>
<td>254</td>
<td>38,3</td>
</tr>
<tr>
<td>Concordia</td>
<td>ETS</td>
<td>1,7</td>
<td>579,8</td>
</tr>
<tr>
<td>Concordia</td>
<td>INRS</td>
<td>254</td>
<td>45,5</td>
</tr>
<tr>
<td>Concordia</td>
<td>Bishop's</td>
<td>155</td>
<td>69,0</td>
</tr>
</tbody>
</table>
Non-Montréal Universities

Laval

\[ R^2 = 0.0118 \]

UQ Chicoutimi

\[ R^2 = 0.0711 \]

UQ Rimouski

\[ R^2 = 0.1876 \]

UQ Outaouais

\[ R^2 = 0.1759 \]
Networks are “a general yet powerful means of representing patterns of connections or interactions between the parts of a system”\(^1\)

“the opportunities for social network analysis research in library specific contexts remain outstanding”\(^2\)

---

Network Diagram: CREPUQ Direct Reciprocal Borrowing 2005-2010
CONCLUSIONS/RELEVANCE

- Different resource sharing patterns between Montréal and non-Montréal libraries; effect of distance, collection size, FTE

- Resource sharing of physical materials may play an important role as questions of storage space escalate (e.g. consortia-wide storage of physical materials?)

- Studying resource sharing patterns will allow us to better understand and plan for the use of these services
ACKNOWLEDGEMENTS

- CREPUQ

- Concordia University Libraries
Questions?