A high-angle photograph of the Cornell University campus, featuring the prominent red brick clock tower with a blue-tiled spire. The tower is surrounded by other historic buildings with similar architectural styles. In the background, a large blue lake (Cayuga Lake) is visible, with rolling green hills in the distance under a clear blue sky. A large, semi-transparent circular graphic is overlaid on the left side of the image, containing the title and author information.

Increasing Data Literacy Instruction through Improved Outreach: A Case Study From Cornell University Library

Whitney Kramer
Cornell University Library

Introduction

- Catherwood Library supports Cornell's ILR (Industrial and Labor Relations) School
- Increase in data-focused assignments from professors and questions from students in ILR classes – more instructional support needed.
- New position – ILR Research and Data Librarian



Cornell Demographics

- Approx. 15,000 undergraduates
- Approx. 10,000 graduate & professional students
- Approx. 3000 faculty and academic professional staff
- Over 100 academic departments across 14 undergraduate and graduate schools
- ILR: 1000+ undergraduates, 200 graduate students



Economics Superdepartment

Economics

College of Arts &
Sciences:
Economics

ILR: Labor
Economics

Brooks School of
Public Policy: Public
Policy Economists



Cornell University Library

- 14 physical and virtual libraries
- Just over 300 total staff
- 100+ librarians and archivists
- Catherwood Library: 21 total staff, 5 reference librarians
- 10-12 data librarians across campus

Assessing User Needs

What are the needs of my liaison departments?

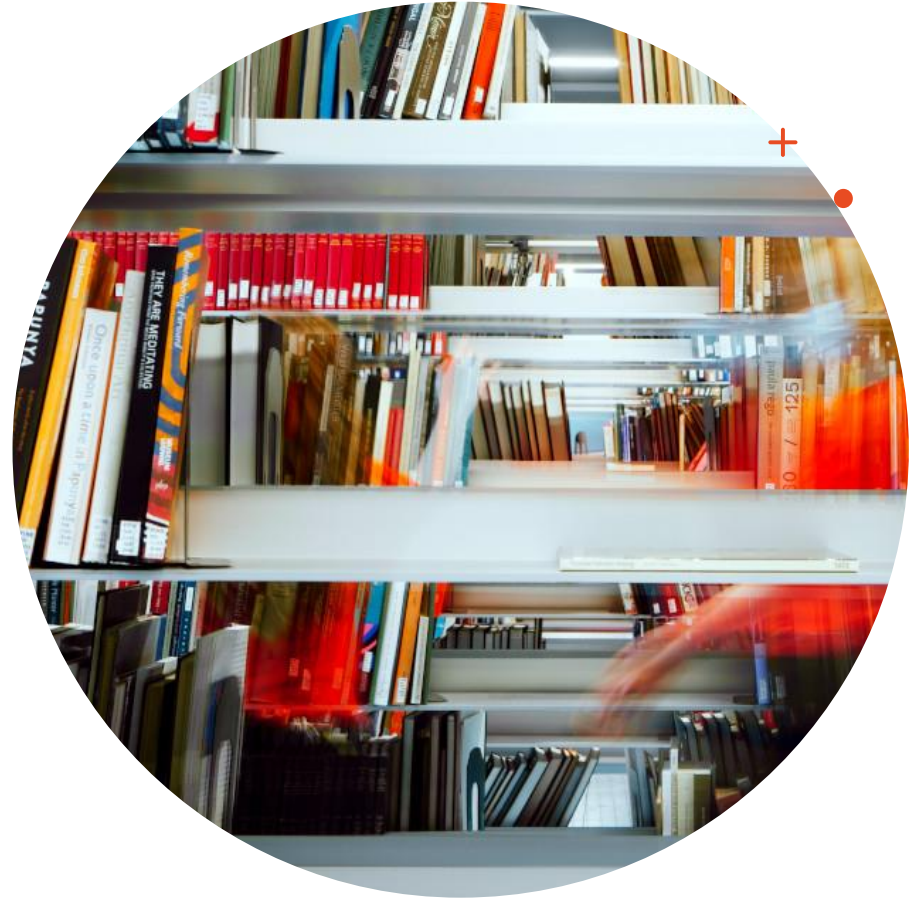
What specific data-related instruction services would benefit our constituents?

What can I bring to the table that isn't offered elsewhere on campus?



What are the needs of my liaison departments?

- Not needed: Faculty data management needs already covered in existing infrastructure
- Large percentage of students from quantitative data-heavy classes requesting assignment-specific consultations.
- Conclusion: Could focus almost exclusively on undergraduate student needs.



What are the needs of my liaison departments?



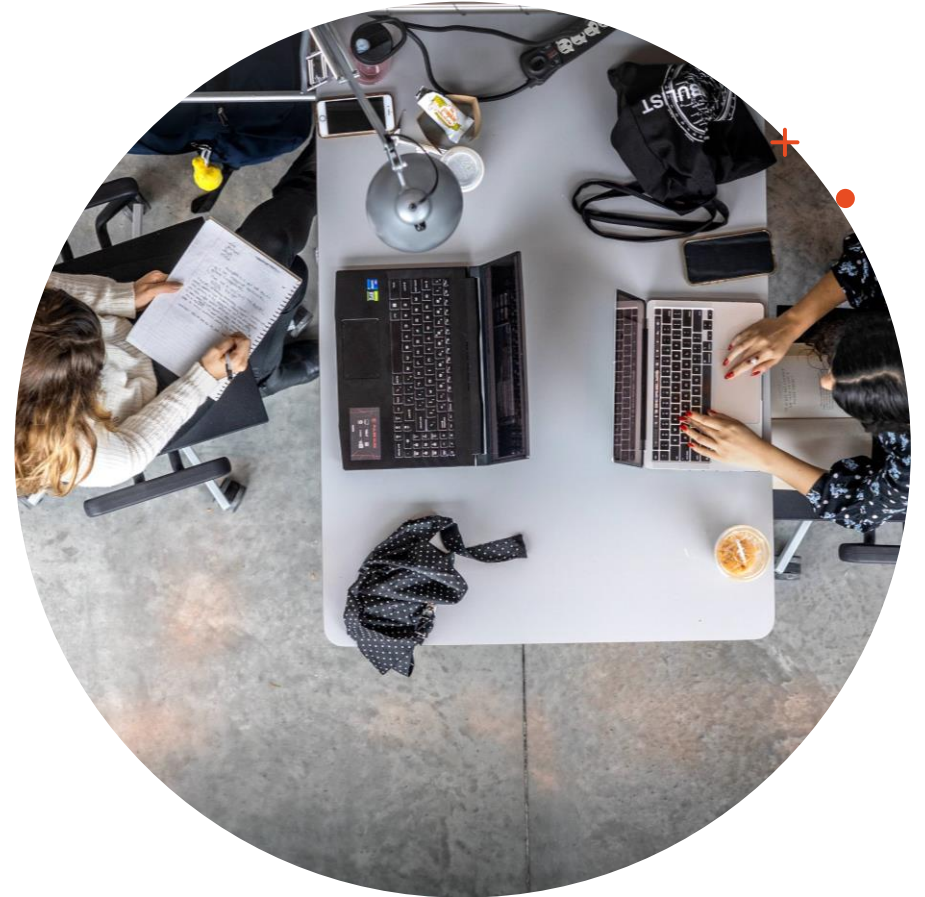
What specific data services would benefit our constituents?



What can I bring to the table that isn't offered elsewhere on campus?

What would benefit our constituents?

- Students needed help with locating and evaluating data for assignments.
- Statistical analysis concepts taught, but no basic data finding or evaluation skills.
- Clear void in undergraduate instruction!
- More support needed for **early-stage data literacy**.



What are the needs of my liaison departments?



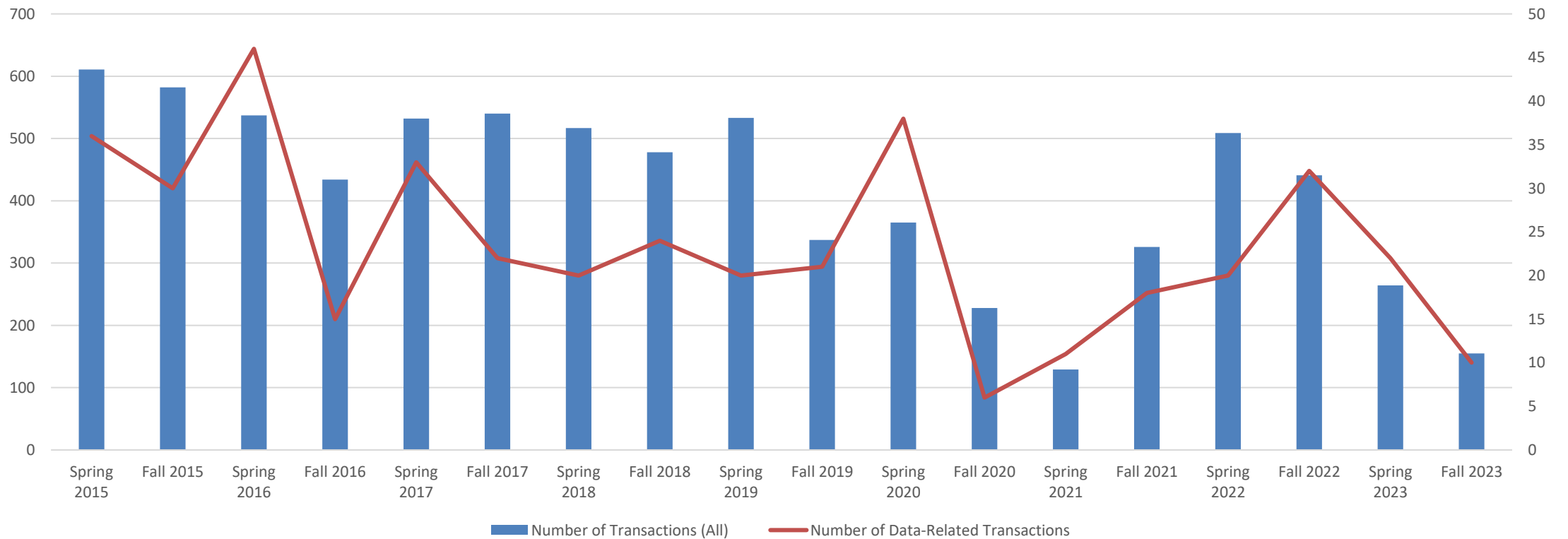
What specific data services would benefit our constituents?



What can I bring to the table that isn't offered elsewhere on campus?

Reference Transaction Data

Count of Reference Transactions by Semester
Spring 2015 - Fall 2023



Library Instruction Support for Quantitative Classes

- Data literacy-specific **one shots** for quantitative data-heavy classes in the social sciences
- Focus on “early stage” data literacy concepts
- Outreach to professors of target classes
 - ILRST 2130: Applied Regression Analysis
 - Required statistics class for transfer students who are not bringing in statistics credit
 - ILRLE 2400: Economics of Wages and Employment
 - Required introductory Labor Economics class for all ILR sophomores
 - Senior Honors Thesis



What are the needs of my liaison departments?



What specific data services would benefit our constituents?



What can I bring to the table that isn't offered elsewhere on campus?

ILRST 2130: Applied Regression Analysis

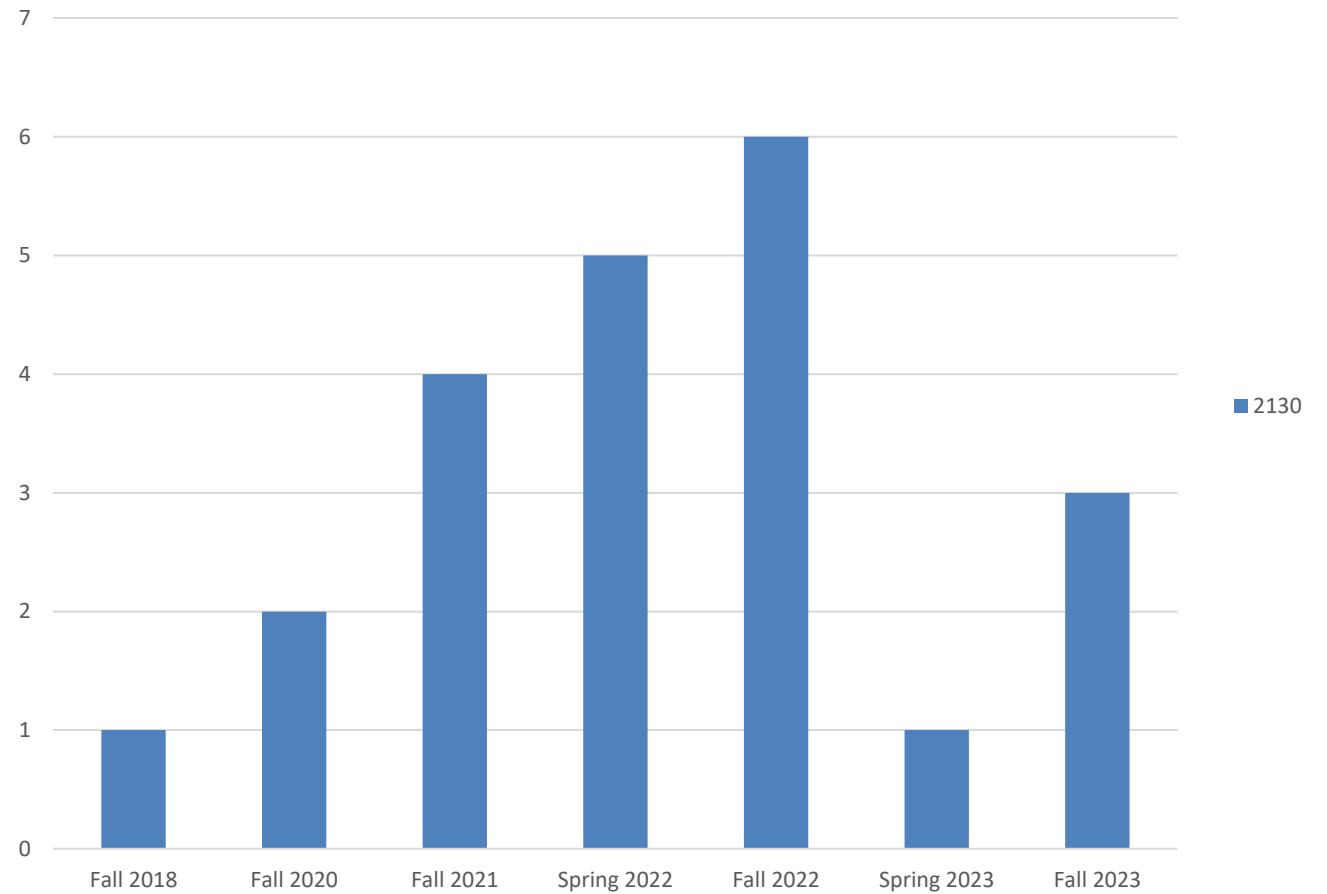
- Professor did not realize that students were asking librarians for help locating data for their assignment.
- Assignment: Find a data set that meets certain parameters that students can use for all regression assignments throughout semester.
- One-shot session has evolved over time, from focusing exclusively on locating data to broader data literacy concepts.



[Link to ILRST 2130 Course Guide](#)

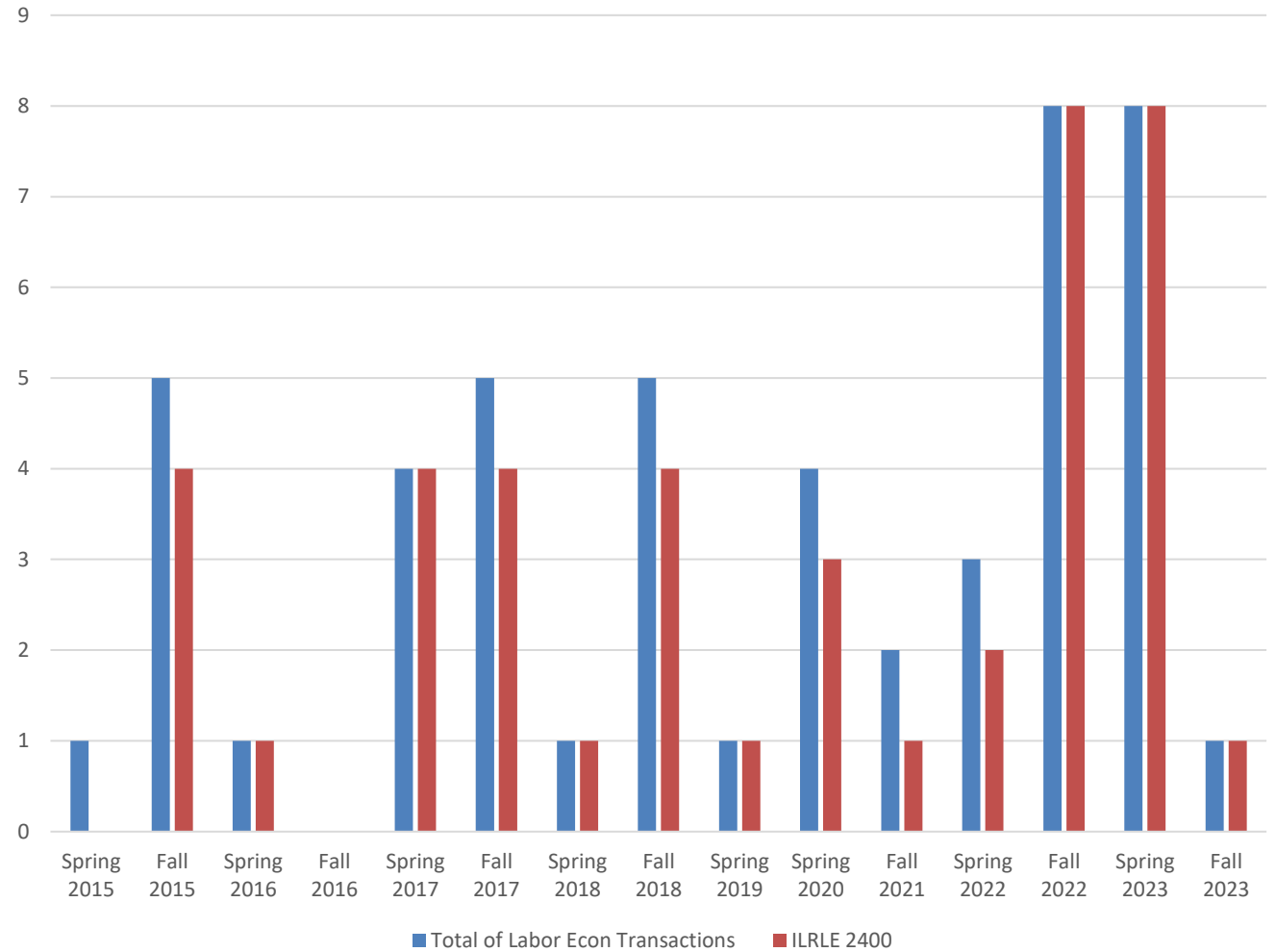
Reference Transaction Data: ILRST 2130

Count of Reference Transactions for ILRST 2130, 2015-2023



Reference Transaction Data: ILRLE 2400

Labor Economics Class-Related Information Transactions, Spring 2015-
Fall 2023





ILRLE 2400: Economics of Wages and Employment

- Professor had historically been reluctant to collaborate with the library.
- Targeted outreach started in Spring 2020, did not teach a class session until Spring 2023.
- Assignment primarily requires students to locate data on a state level

Future Goals

- Data literacy instruction for additional Labor Economics and Statistics classes
- More collaboration with other data librarians across campus
- Seminar for senior honors students
- Expand work with graduate student population – Economics is one of the largest graduate departments at Cornell





Questions?

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