Library Services Data:

Assessing Impact on Student Success in a Data-Informed College

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Systems & Digital Technologies Librarian

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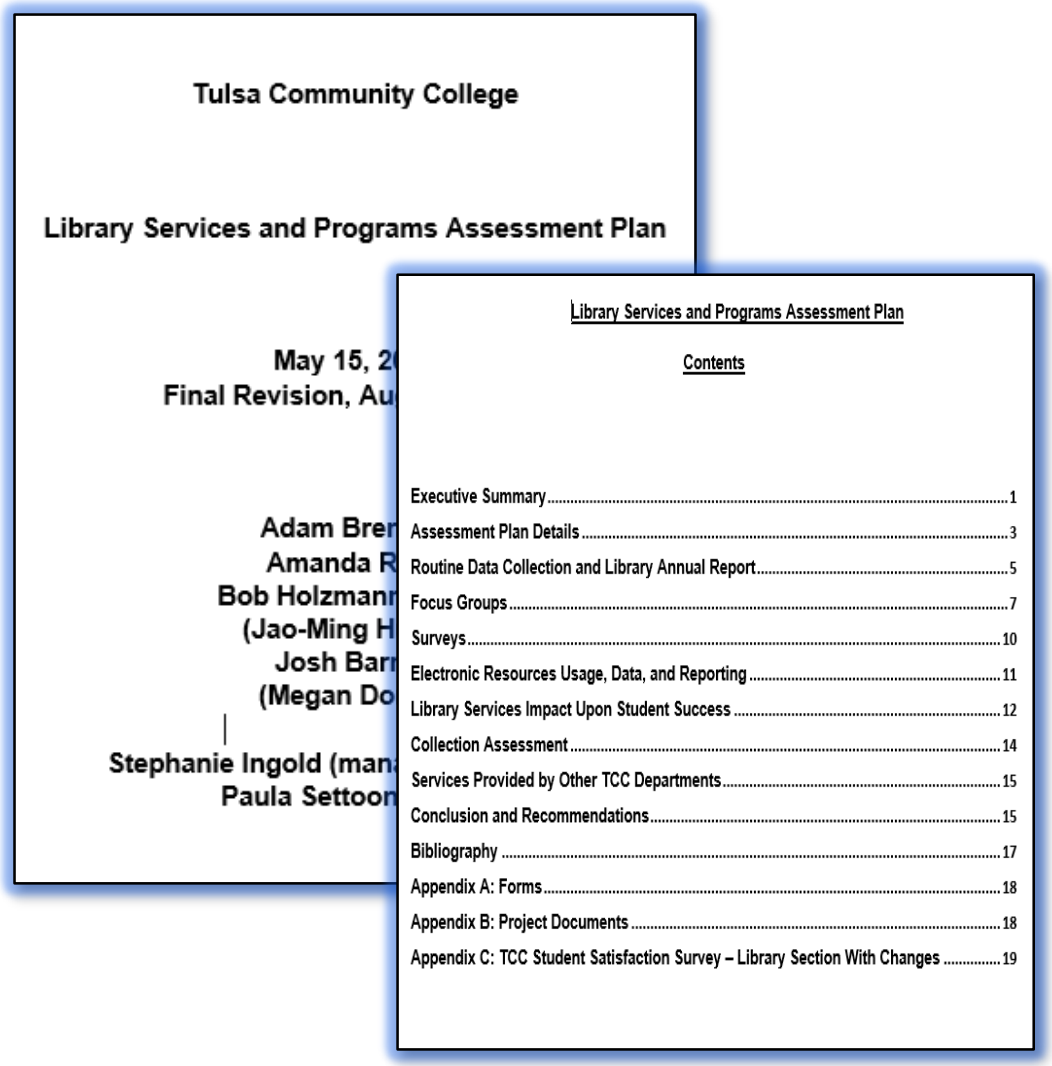
Oklahoma Association of College and Research Libraries

TULSA COMMUNITY COLLEGE | LIBRARY
EXPLORE. DISCOVER. SUCCEED.

Library Services Data: Assessing Impact on Student Success

Team members:
Adam Brennan, Amanda Ross, Josh Barnes, Bob Holzmann (leader), Stephanie Ingold (library management liaison), Paula Settoon (Dean)

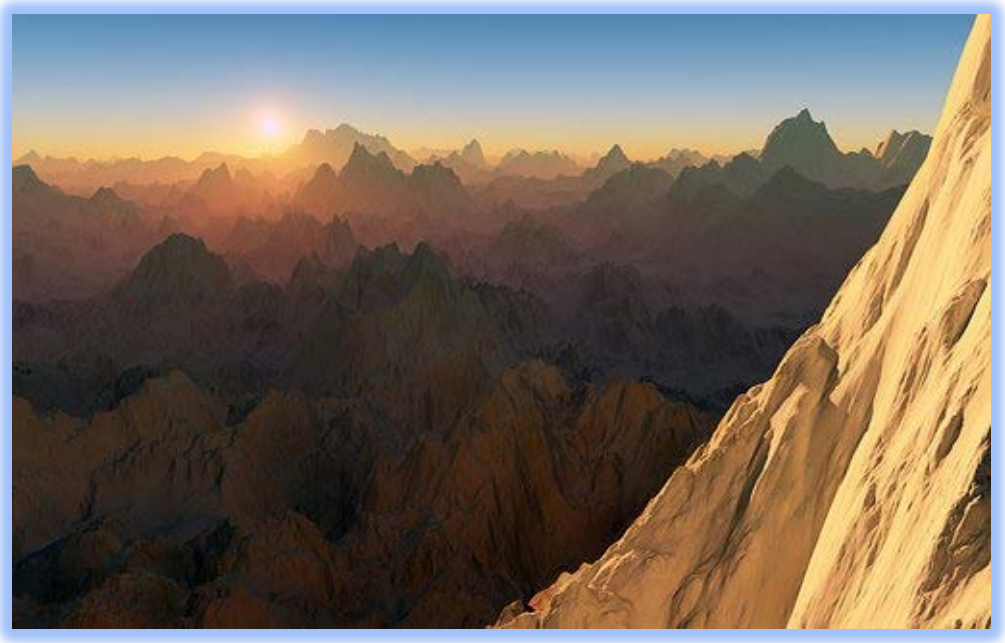
The Library Services Assessment Plan



- Executive Summary
- Background Details
- 7 parts: Methods & Data Info
- Conclusion
- Bibliography

Library Services Assessment Plan

- **Library Services Impact Upon Student Success: Method and Data**
- **Recommendations**
- **Implementation**



Background: “In the Beginning”

- No Existing Formal Library Assessment Plan
- Assessment? What is Library Assessment?
- Reasons to assess library services?
- Why Count, Measure, and Report?

Our Strategic Plan: Goals, Objectives

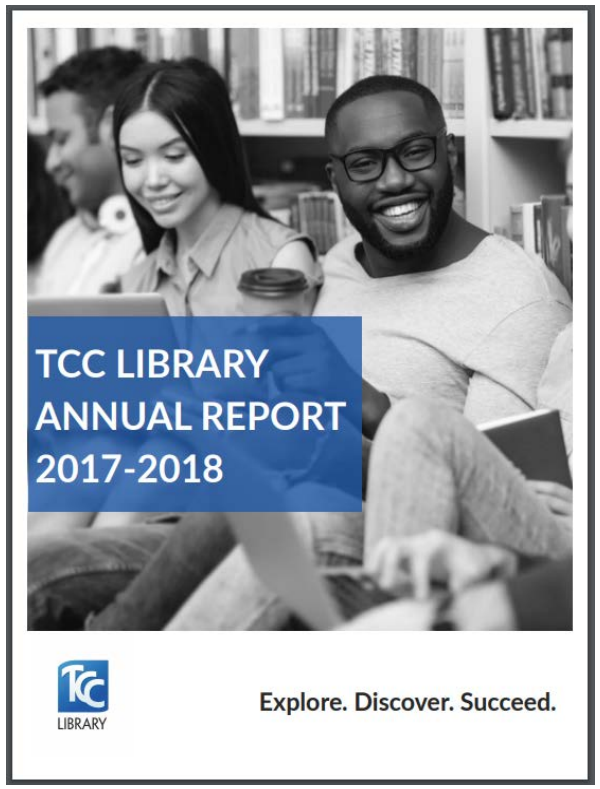
- **College and Library Strategic Plans Goals & Objectives**
- TCC Goal: **Performance Based Culture**
- TCC Objective: **Institutional Effectiveness Plan**
- Library Objective: Create a formal **services evaluation plan**
- Library Objective: **Tie data to operations, activities, programs**, etc.

Data: Why We Count, Measure, Report

- A “Data-informed” Organization
- Evidence-based Performance, Evaluation
- Qualitative versus (or plus) Quantitative
- Justify, Improve, Add Library Services
- Workload measures: Staffing, Hours, Output
- Bragging Rights !

Assessment Plan Methods, Data

Routine Data / Library Annual Report



- Library Computer Lab: use by log-ins
- Print and online: usage & holdings
- College-wide Totals: not by campus
- Technical Services: workload output
- Provide counters: all library entrances

Acquire & Use Data: Focus Groups

- Qualitative assessment method: Hard & Soft Data
- Couple with customer service mapping technique
- Limit number of issues, participants
- Explore specific areas of satisfaction/dissatisfaction
- Combine: library surveys with focus groups
- Collect Data: Analyze, Interpret, Report, Decide

Acquire & Use Data: Surveys

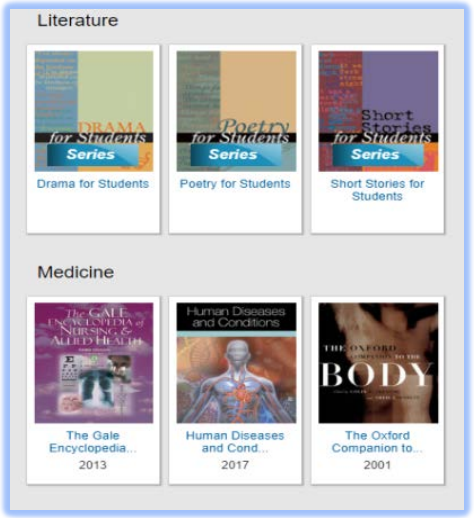
- Qualitative or quantitative methods
- TCC's college-wide surveys
- Conduct: limited library-only surveys
- Create: Internal library survey instrument
- Combine: library surveys with focus groups
- Collect Data: Analyze, Interpret, Report, Decide

Acquire & Use Data: E-Resources Stats

- Bi-annual Usage Reports revised
- Online Articles, E-Books, E-Videos, E-Reference
- Usage/Cost Data for analysis, selection, planning
- Cost Analysis: Print vs. E-Resources
- Usage, Holdings data for IPEDS and ACRL
- Access data logs: Statistical impact on student success

Collection Assessment

- Custom Reports to Evaluate Collections
- Interlibrary Loan (ILL) requests analysis
- Missing and Lost items
- Electronic Resources versus Print
- Online Resources for New Academic Programs
- Open Access Collections and OER



Other Departments' Services within the Library

- Services in the library provided by other departments
- Effect students' use and perception of the library
- Future assessment of such services

The Top Measure: Student Success

- **Academic Achievement: GPA**
- **Persistence: 3 years to completion**
- **Completion = Graduation or Transfer**
- **Degree and Certificate Programs**

So, what impact do library services have upon student success?

Library Services Impact on Student Success

- Historically, assessment of library effect on academic success was impossible to measure and quantify
- How to achieve quantitative evaluation using hard data and make the connection?

- Recent published studies about statistical methods to correlate library use and student success
- Embark on a journey into new assessment territory that few others (and no community colleges) have explored

Library Services Impact on Student Success

- Soria, Fransen, and Nackerund's & other studies demonstrating library impact on student success
- Methods for obtaining our data are in place
- Investigate possible correlation and impact:
  - Multivariate statistical analyses
  - Longitudinal studies
  - Creative improvements to methodology
  - Longer-term predictive studies

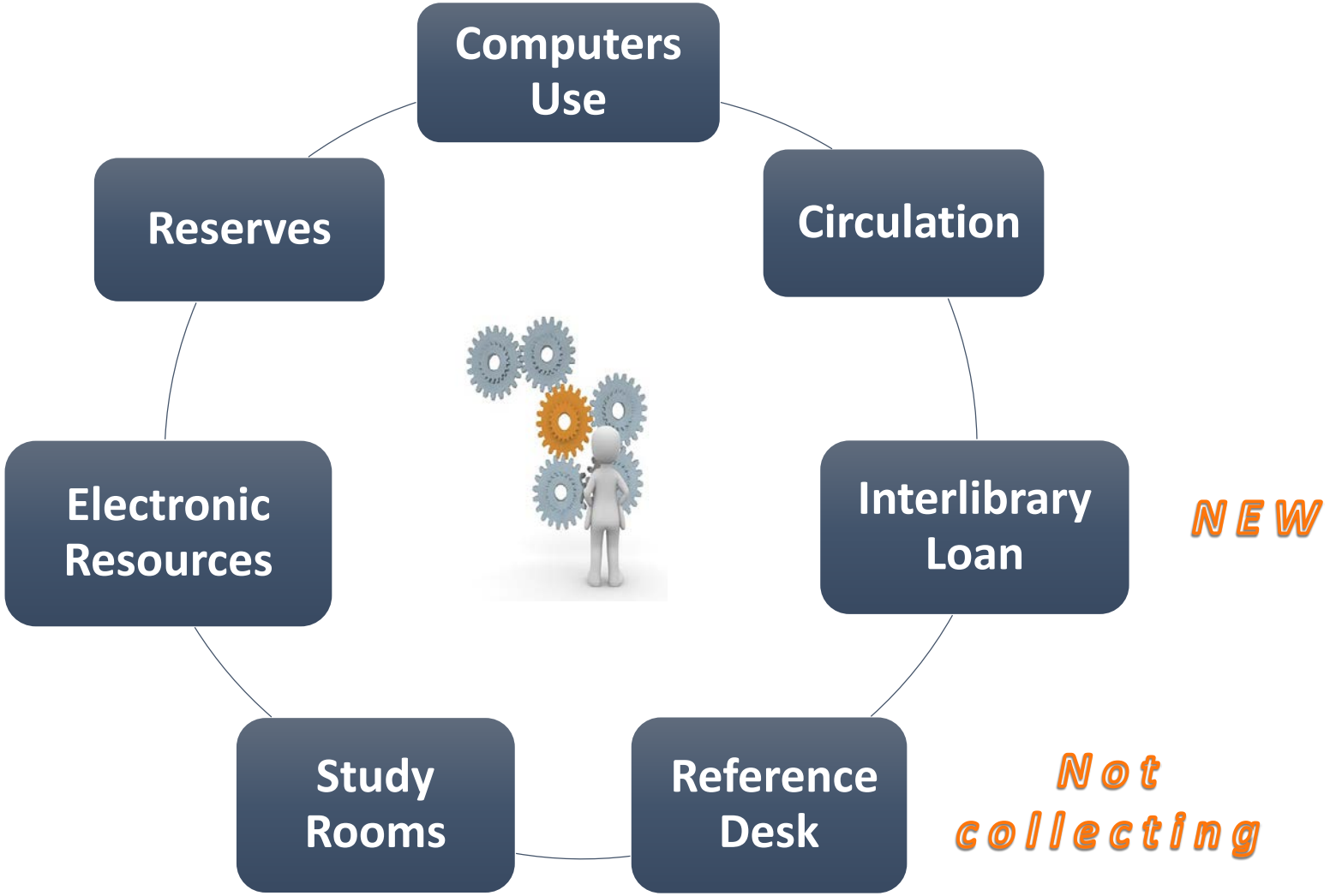
Library Services Impact on Student Success

- **Approval from TCC's Institutional Review Board (IRB)**
- **Strengthening TCC Partnerships:**
  1. **Institutional Research & Assessment (IR&A)**
  2. **Information Technology Infrastructure Services (ITIS)**
  3. **Academic Departments & College Leadership**
- **Statistical methods couple Library users' data with student information, academic data, other services**
- **Balanced mix of quantitative and qualitative**

Data: Impact on Student Success

- **Points of Service (POS): Contact via systems or staff**
- **Library academic services that impact student success**
- **Data Points defined for library services**
- **Systems Enhancements and Planning**

Data: Services for Student Success



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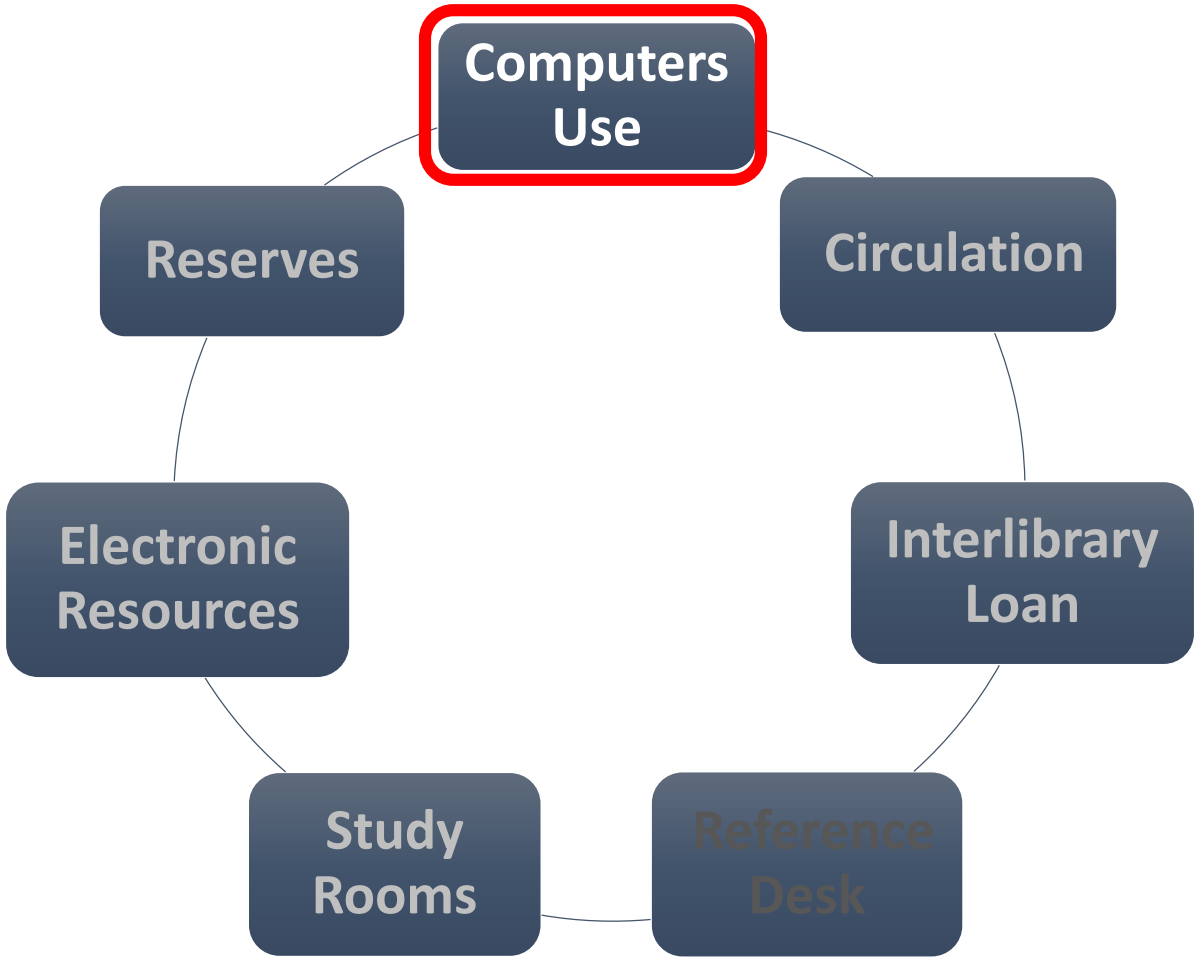
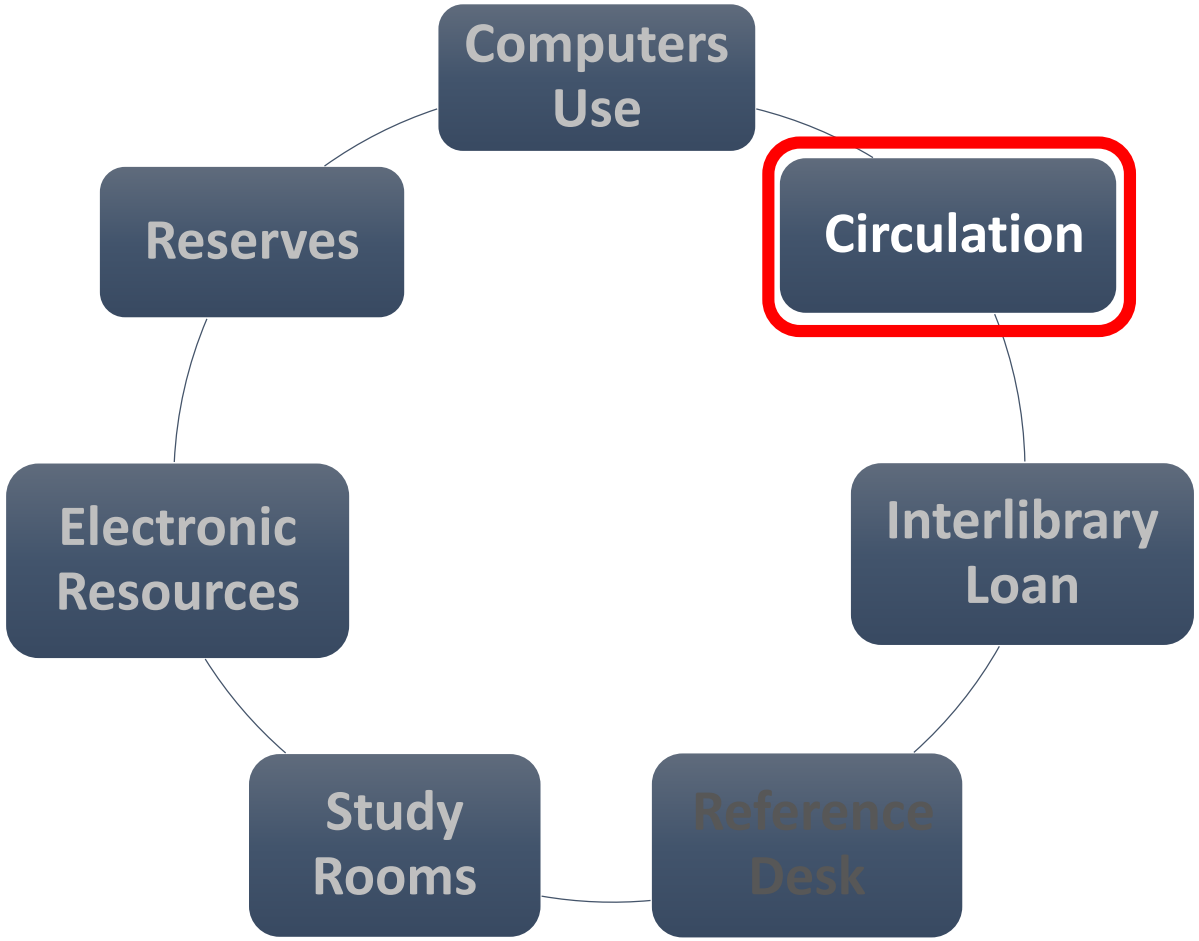


Library Computers Used

- Successful Logins
- Computer Hostname
- Grouped by Campus Library
- Provided each Semester
- I.T. gets files from archived logs

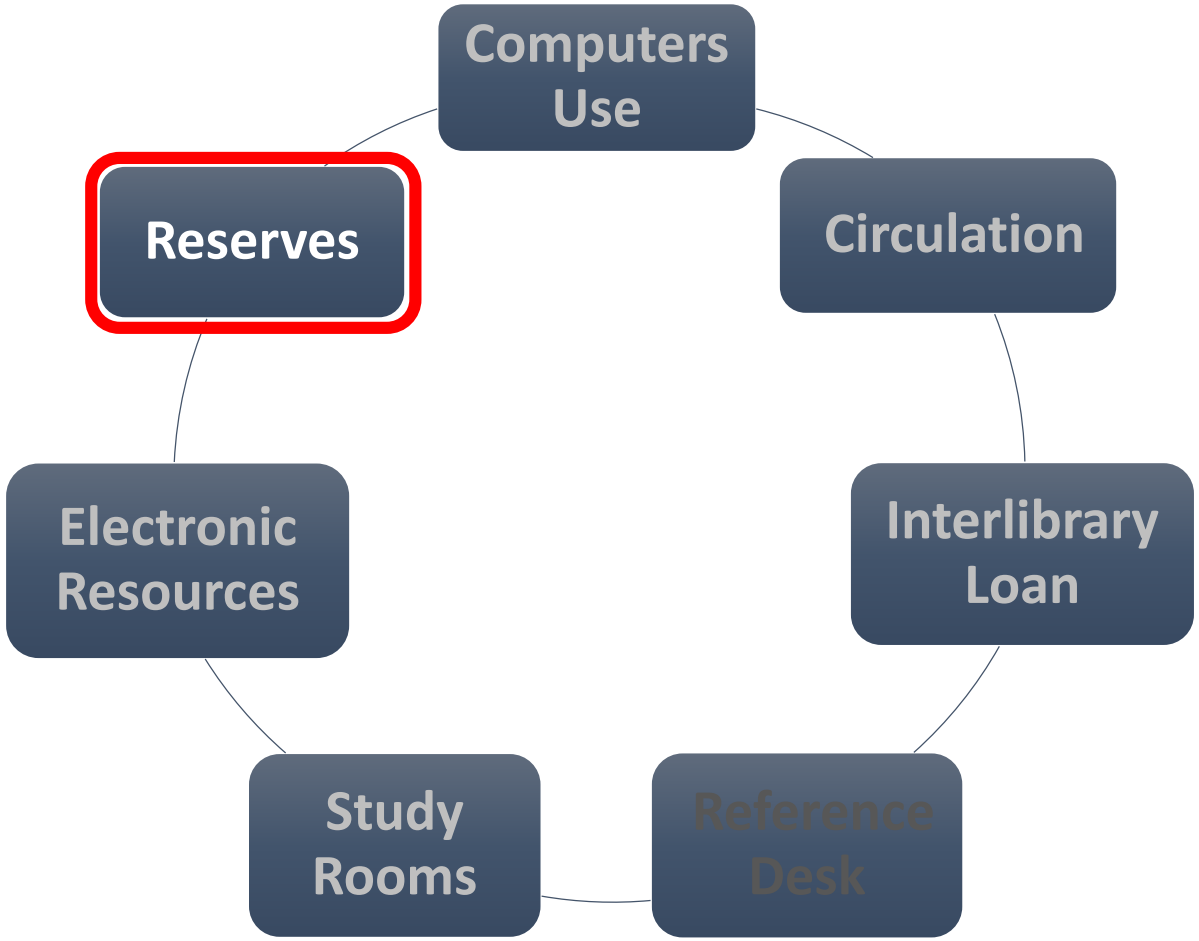
Data: Services for Student Success



Circulating Collections

- Check-outs and Renewals
- Worldshare Mgmt System
- WMS Reports/Analytics
- Provided from WMS database

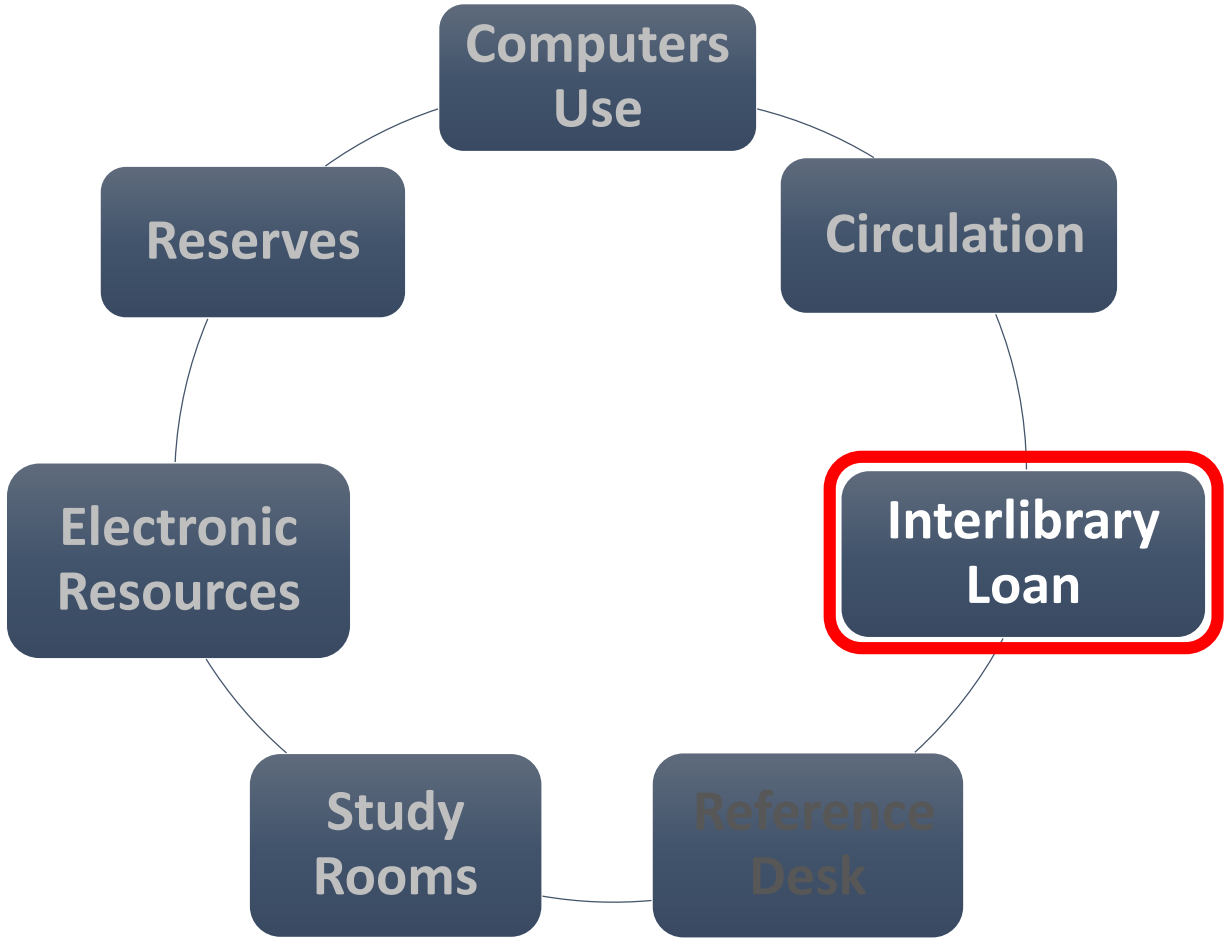
Data: Services for Student Success



Course Reserves Use

- Check-outs and Renewals
- Worldshare Mgmt System
- WMS Reports/Analytics
- Reported by Semester

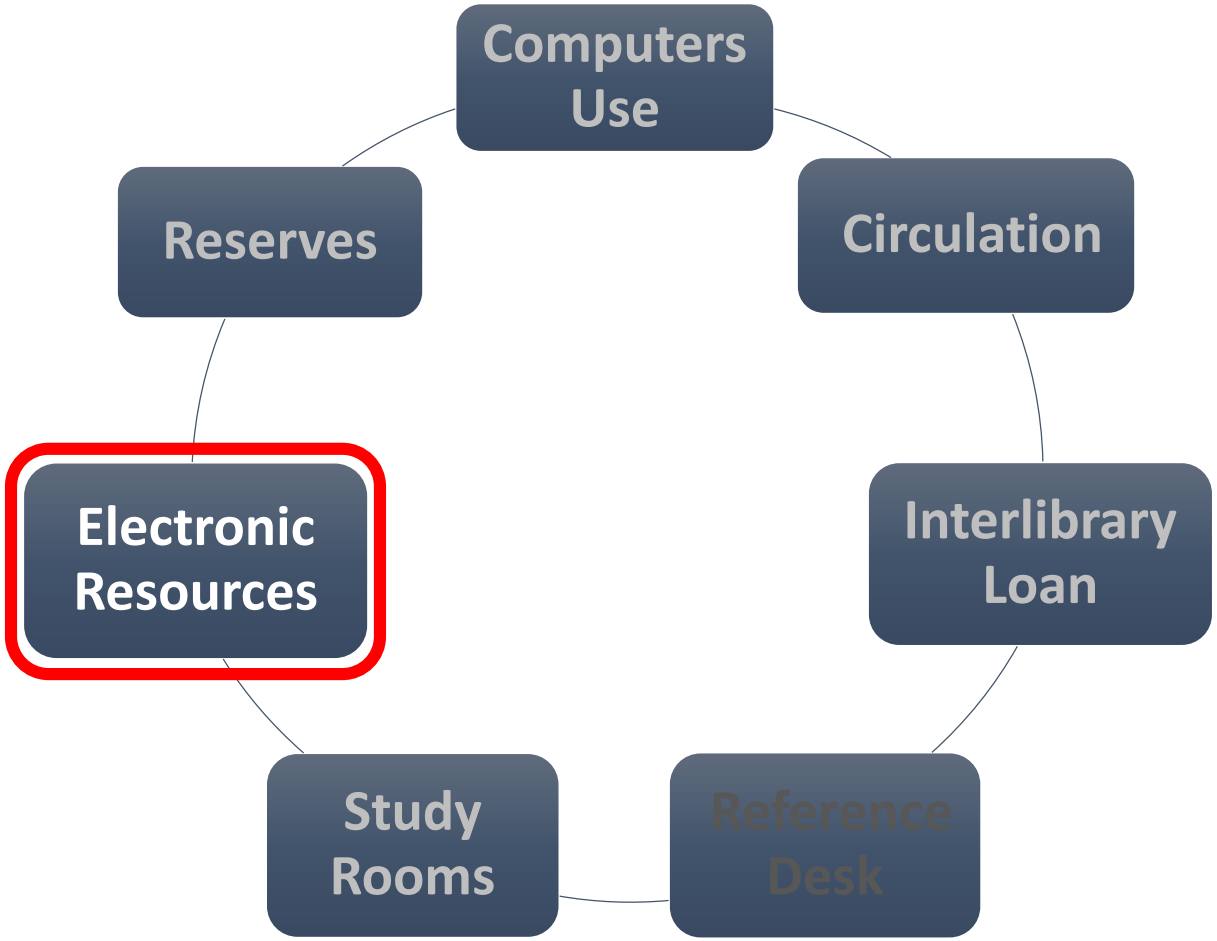
Data: Services for Student Success



InterLibrary Loan NEW

- OCLC Tipasa ILL
- Data Export to Excel
- Borrowing: Closed, Supplied
- Enhancement Summer 2018
- Reports last 400 transactions

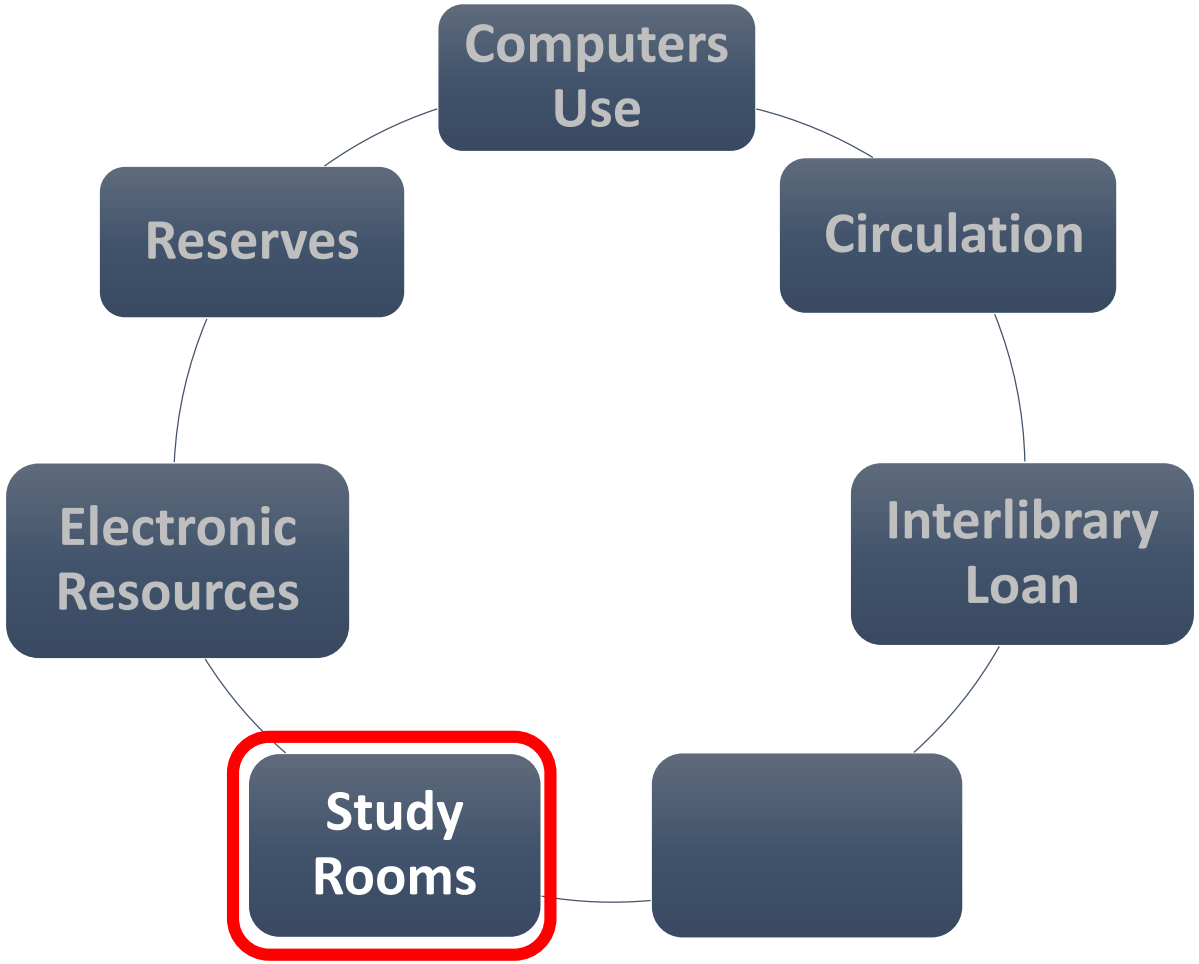
Data: Services for Student Success



Electronic Resources Use

- EZproxy Custom SPU logging
- SPU log rolls-over monthly
- ALL Authentication Required
- Subscription e-Resources
- SPU logs copied, converted

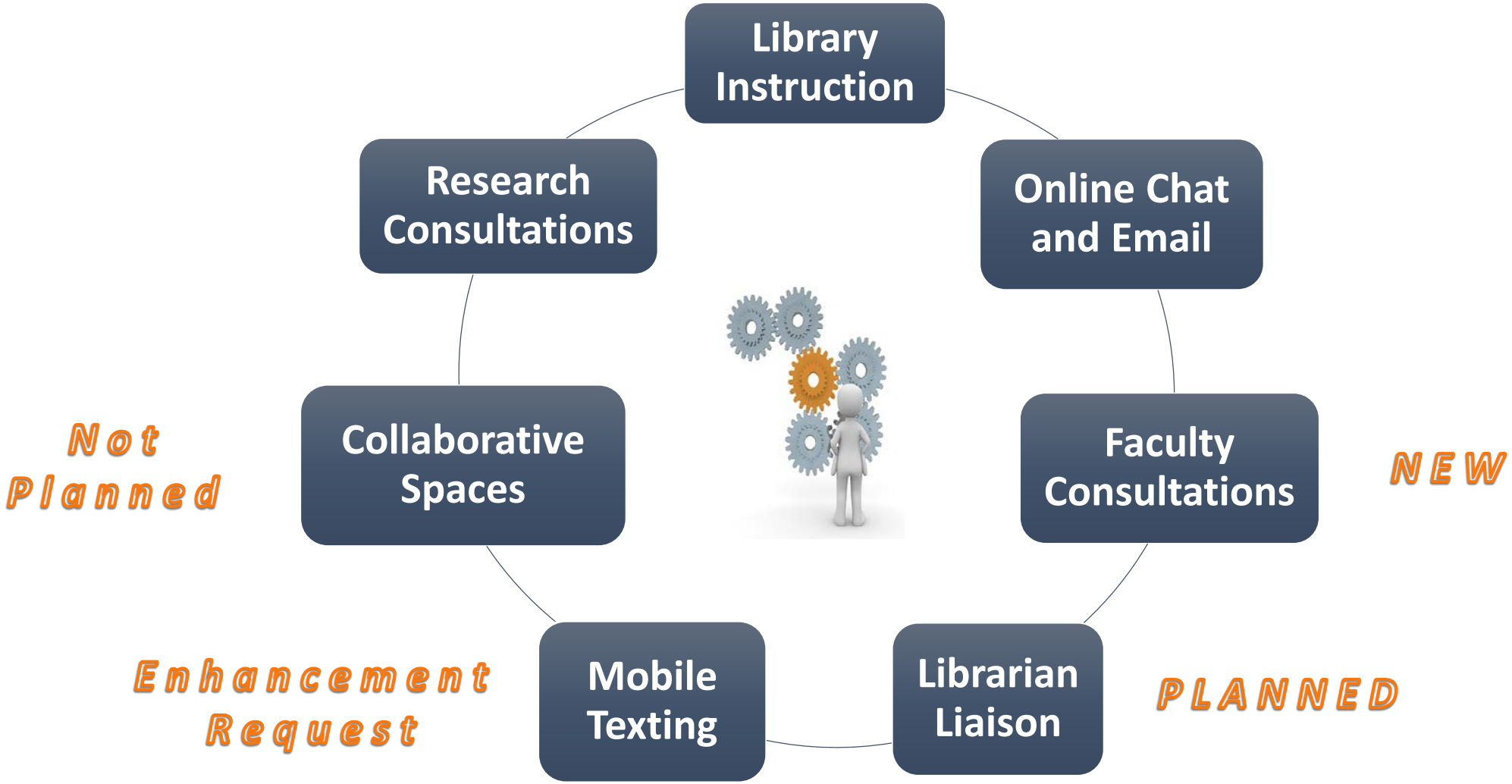
Data: Services for Student Success



Study Rooms Use

- Think Tanks, Library Classrooms
- All students TCC IDs in a group
- Springshare LibApps
- TCC ID required field added
- LibWizard Survey Report export

Data: Services for Student Success



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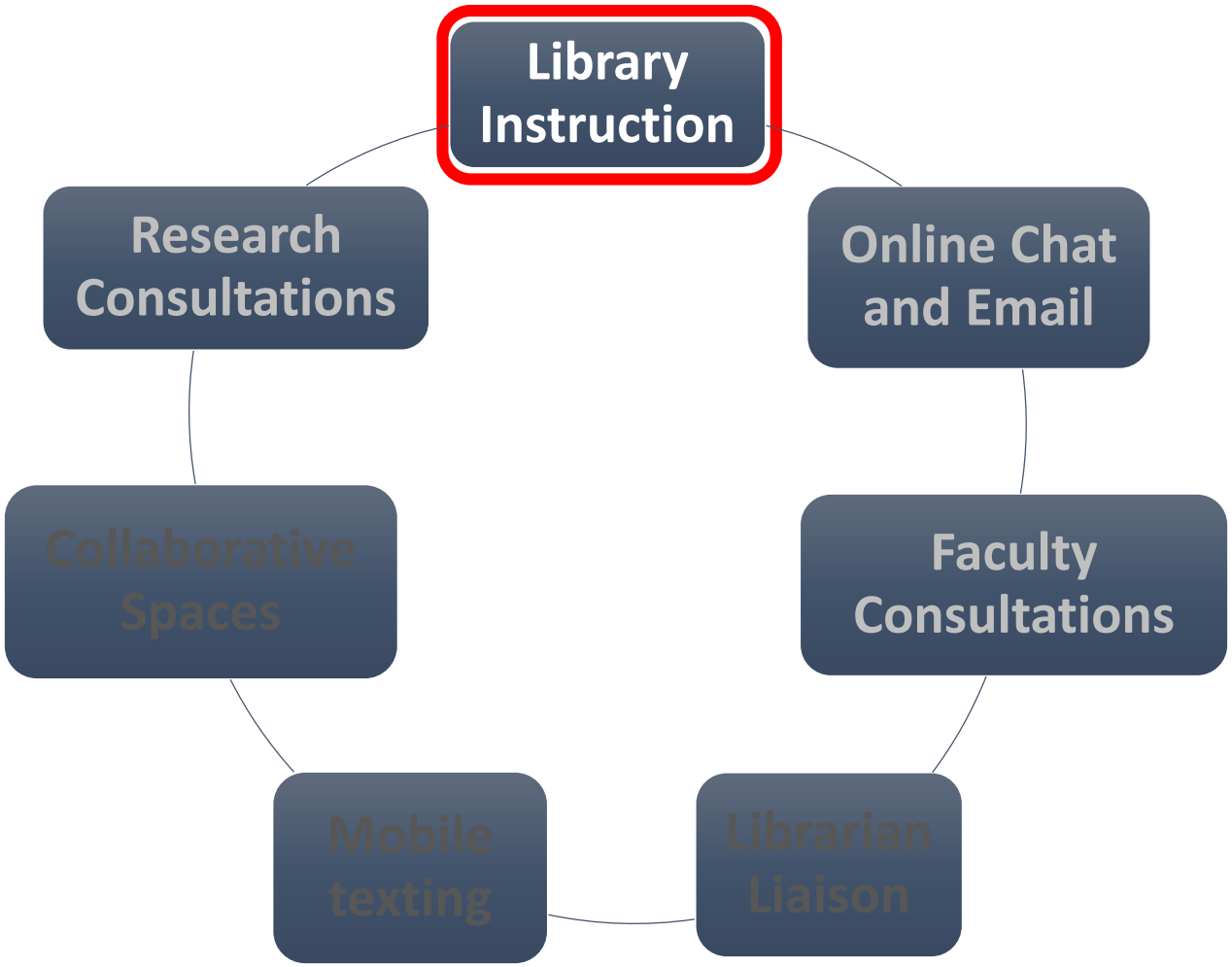
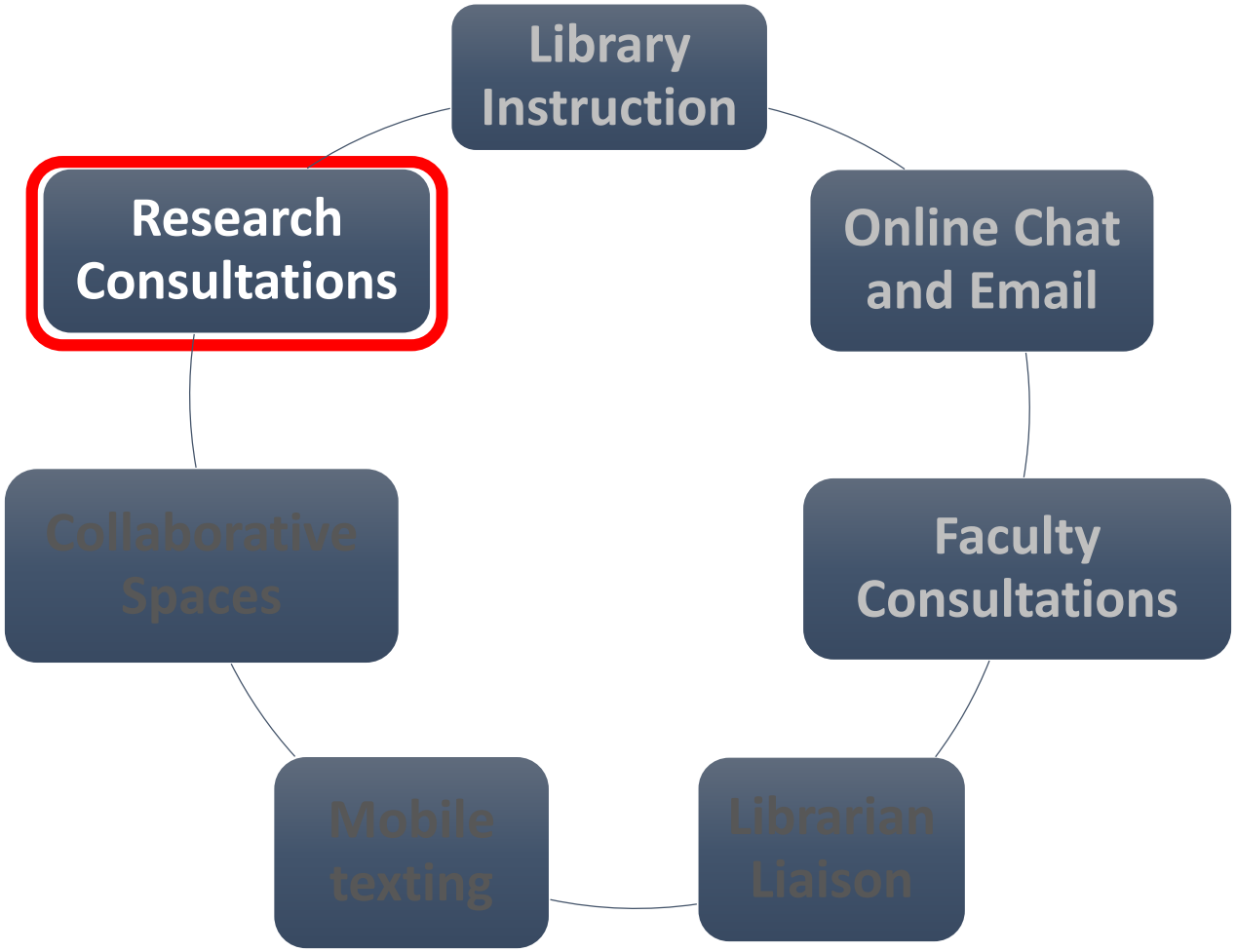


Library Instruction

January, 2018

- Librarian as the Instructor
- Library Instruction in any classroom
- Faculty, Course Number, Section
- TCC ID in data for Course & Section
- Librarians enter data in LibInsight
- LibInsights database export

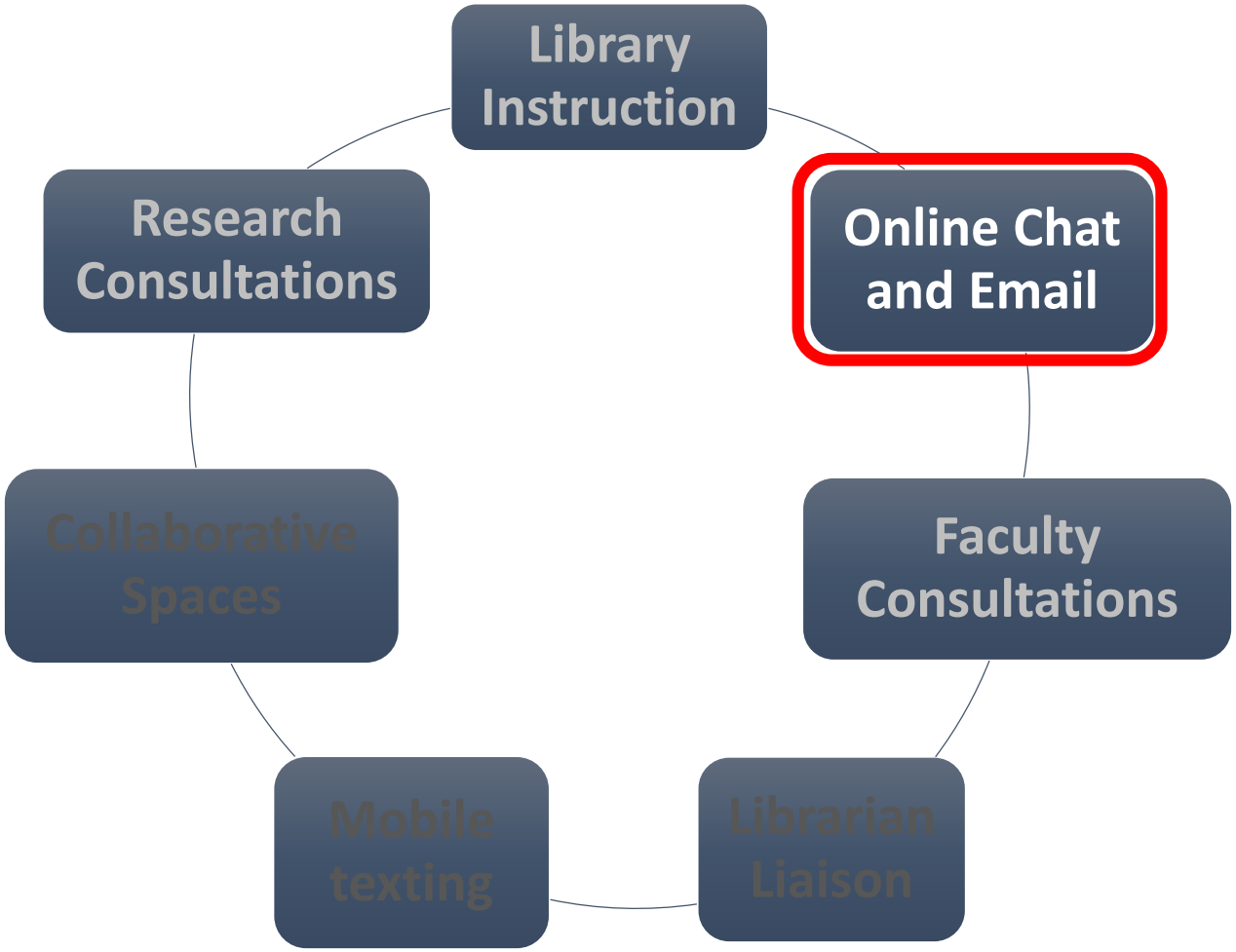
Data: Services for Student Success



Research Consultations *January, 2018*

- Librarian provides direct service
- Appointment or "walk in"
- TCC ID may be entered by Librarian
- Librarians enter data in LibInsight
- LibInsights Database Export

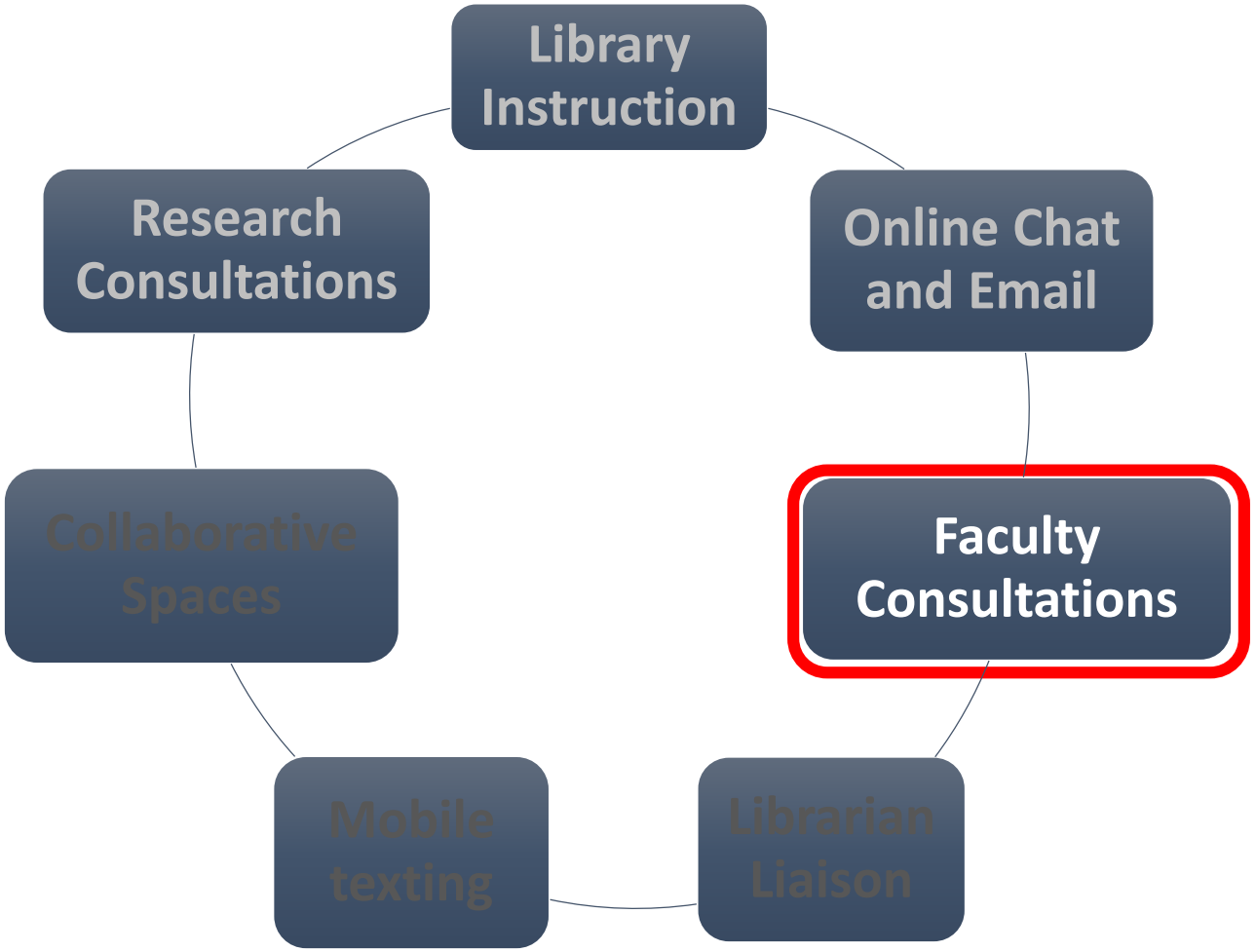
Data: Services for Student Success



Online Chat and Email

- Chat form has TCC ID field
- LibAnswers stats transcripts export
- Email questions, our AskUs Service
- Email form includes the TCC ID
- LibAnswers stats tickets export

Data: Services for Student Success



Faculty Consultations NEW

- Librarian as liaison by subject
- Appointment or on the spot
- Data entered by Librarian
- LibWizard Form, Report export
- How does this impact student success?

Data Analysis: Impact on Student Success

TCC standard statistics parameters and definitions

- Demographics: ethnicity, first generation, socio-economic, etc.
- Time divisions: Semester, Time of Day, Academic Year, etc.
- Cohort - fall semester entering Freshmen, 3 years duration
- Student criteria, definitions: full time, declared major, etc.
- Criteria required to measure Student Success

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Data: Universal Primary Elements

- **Specific library service or program**
- **Student ID number (TCC ID)**
- **Date (Year Month Day)**
- **Hour (00 – 23)**

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Data: Important Additional Elements

TCC LIBRARY

- **Minute (00 – 59) start of activity or point of service**
- **Related types of service activities or functions**
- **Originating IP address if using a computer**
- **Other elements TBD as the study is fine tuned**

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Data: Collect, Protect, Select, Aggregate

TCC LIBRARY

- Perfect, or Not So Perfect ... How perfect is perfect enough?
- Criteria for selecting, preparing data: Limiters, Scope, Redundancy
- Normalize and Trim the data
- Student library services use levels (no use, low, medium, high)
- What don’t we know? Assumptions?

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Data: Collect, Protect, Select, Aggregate

TCC LIBRARY

ezproxy30_20180214SECOND - Notepad

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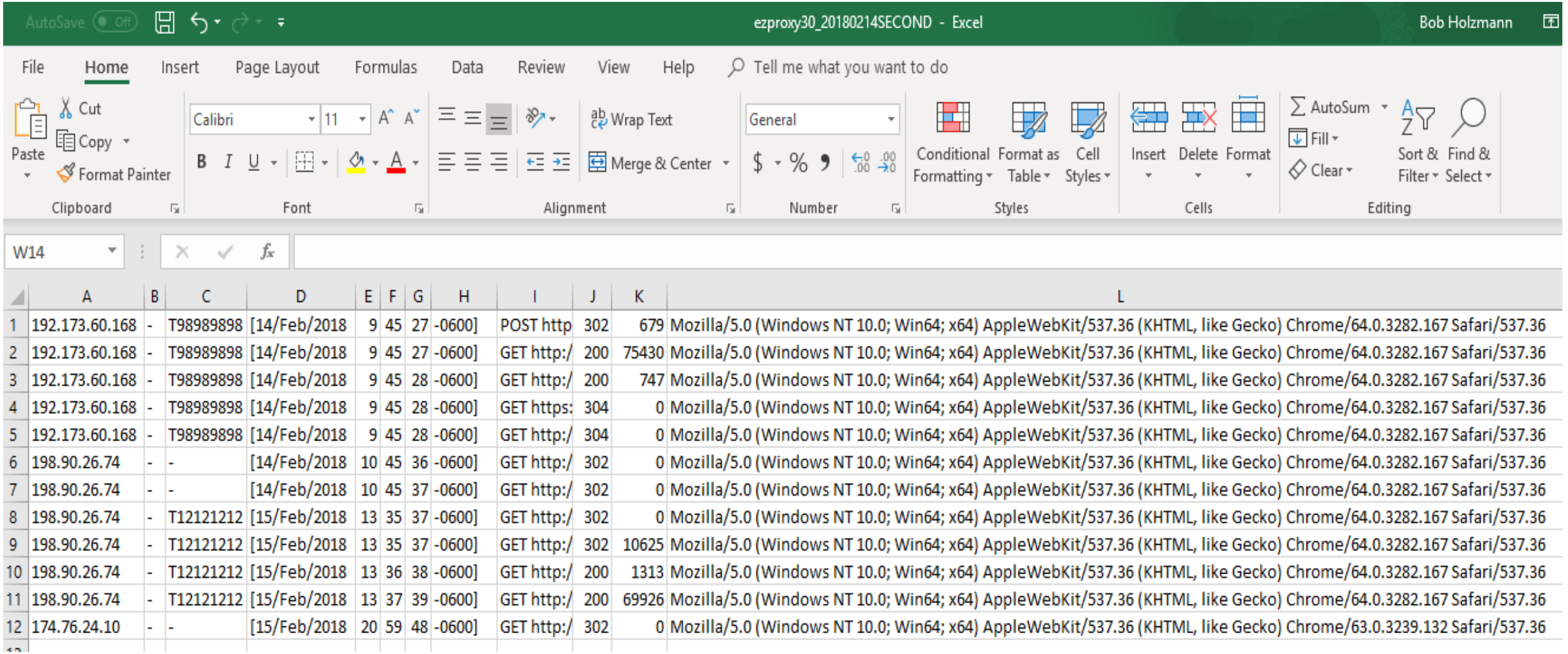
Oklahoma ACRL Chapter

Data: Collect, Protect, Select, Aggregate

TCC LIBRARY



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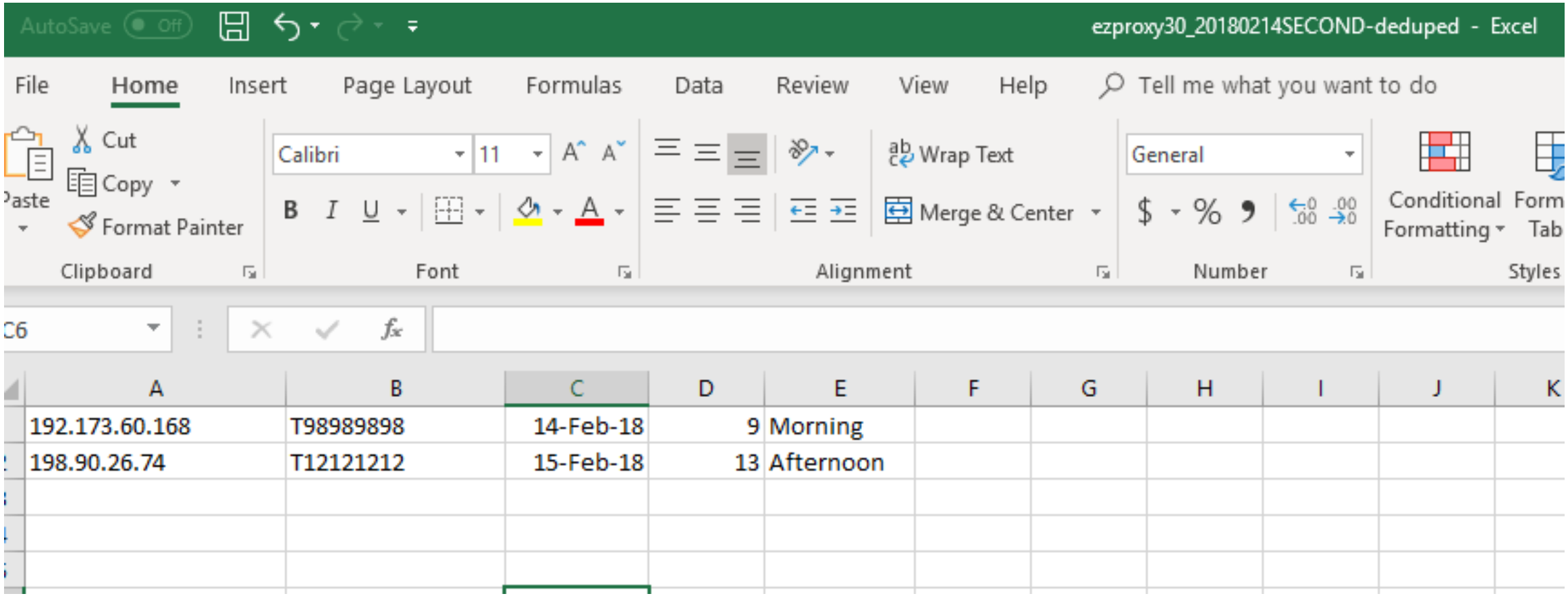
Oklahoma ACRL Chapter

Data: Collect, Protect, Select, Aggregate

TCC LIBRARY



Oklahoma ACRL Chapter

Data: Collect, Protect, Select, Aggregate

TCC LIBRARY

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2	2/19/2018	16	32	76.201.102.171	T123454336	find.galegroup.com	
3	2/19/2018	16	33	76.201.102.171	T123454337	find.galegroup.com	
4	2/19/2018	16	33	166.177.121.110	T123454338	infotrac.galegroup.com	
5	2/19/2018	16	33	10.4.140.27	T123454339	openurl.ebscohost.com	
6	2/19/2018	16	36	70.185.254.212	T123454343	ic.galegroup.com	
7	2/19/2018	16	36	10.4.140.27	T123454344	openurl.ebscohost.com	
8	2/19/2018	16	39	76.201.102.171	T123454346	openurl.ebscohost.com	
9	2/19/2018	16	41	76.201.102.171	T123454347	www.sciencedirect.com	

After 'Remove Duplicates' on A, B, E

A	B	C	D	E	F
2/19/2018	16	22	99.50.47.159	T123454321	search.ebscohost.com
2/19/2018	16	22	10.4.140.27	T123454322	openurl.ebscohost.com
2/19/2018	16	27	76.201.102.171	T123454326	go.galegroup.com
2/19/2018	16	39	76.201.102.171	T123454346	openurl.ebscohost.com

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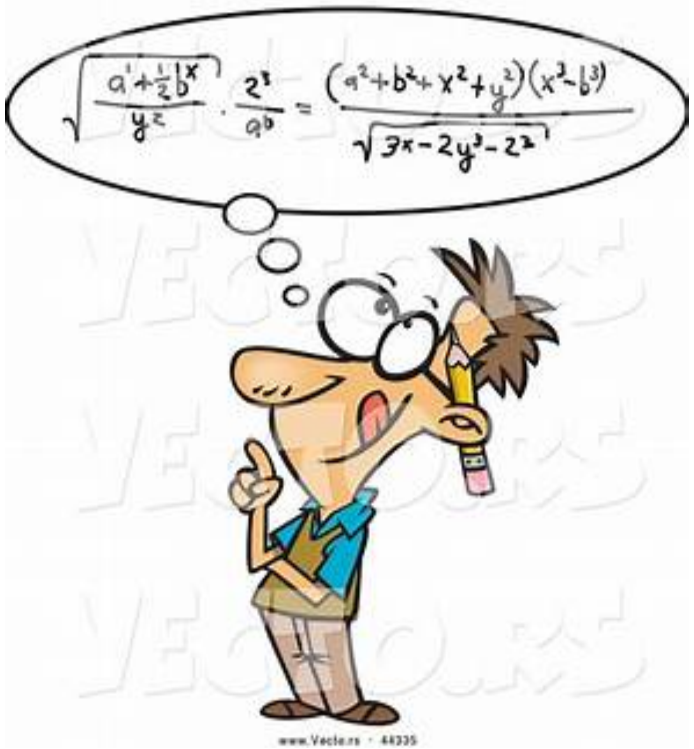
Data Analysis: Impact on Student Success

TCC LIBRARY

- Regression: linear, multiple, stepwise, ordinal
- Multivariate and multicolinearity testing
- Regression Analysis – establish the correlation
- Factor Analysis – find what is most correlated to outcome variables
- A control group? Maybe not …



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Data: Future Assessment Considerations

- **Recently Underway: Librarian Liaison Project Team**
- **Recently Underway: Learning Assessment Project**
- **Future: Applying study results**
- **Future: Predictive Studies and Analysis**
- **Applied Assessment: Program Review! *IMPORTANT***

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Library Services Data:
Assessing Impact on Student Success

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EXPLORE. DISCOVER. SUCCEED.

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Library Services Assessment: Thank you for participating today!

On Behalf of Our Team:
Adam Brennan, Amanda Ross, Josh Barnes, Bob Holzmann (leader),
and Stephanie Ingold (library management liaison)

Assessment: Doing Things Better

"*… now, let's see how we can do this better …*" (Dr. Leigh Goodson, TCC President)

Assessment = Strategic Goals

Assessment = Compliance

Assessment = Cause and Effect

Assessment = Performance

Assessment = Improvement