

Library Assessment using the tools of  
**StatsQUAL®**



Presented by:

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## Agenda

### **Introductions**

- ARL and its Statistics and Assessment Program
- StatsQUAL<sup>®</sup>, ARL's assessment tool platform

### **Description of Assessment Tools**

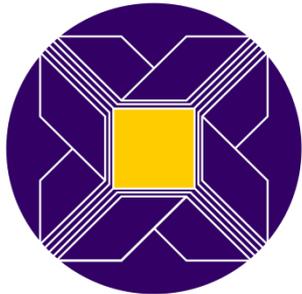
- LibQUAL+<sup>®</sup>
- ClimateQUAL<sup>®</sup>
- MINES for Libraries <sup>®</sup>
- LibValue

### **Other Services**

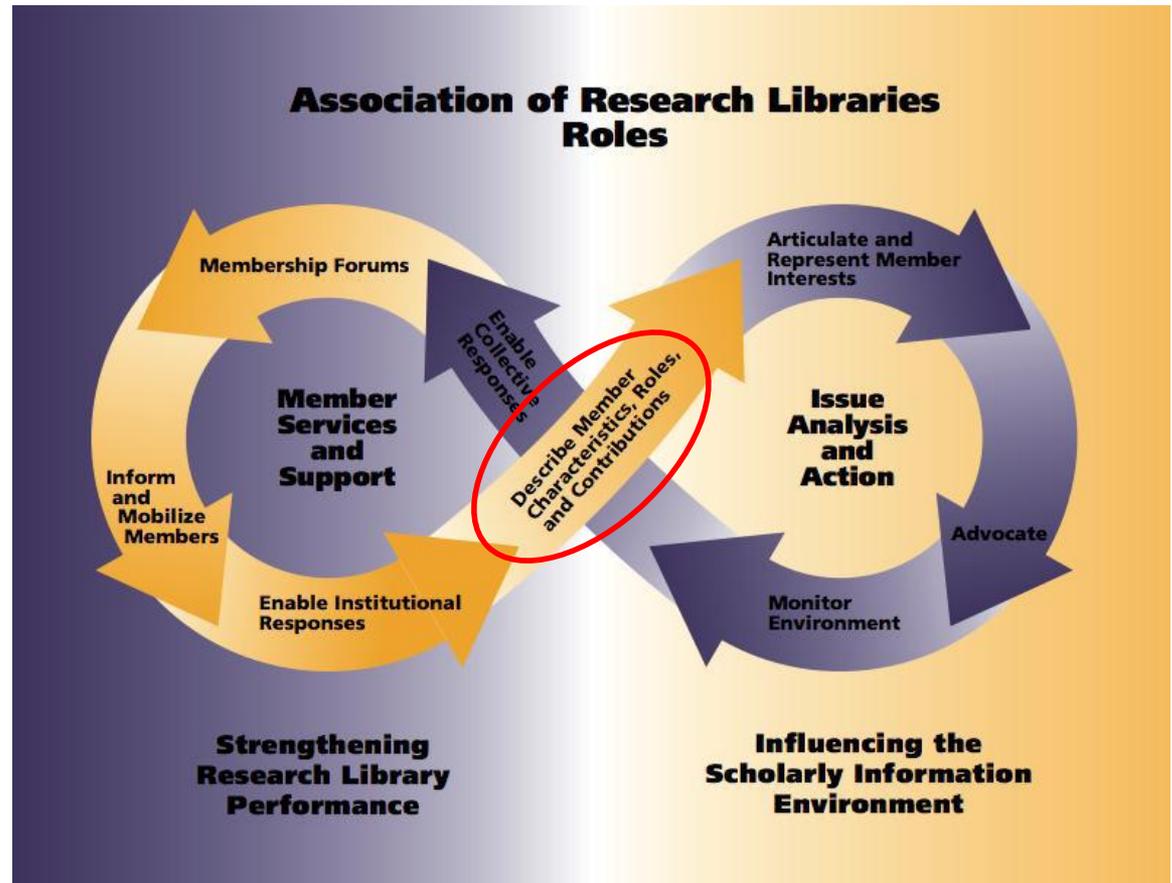
- Assessment Community
- Events



## Introductions - ARL

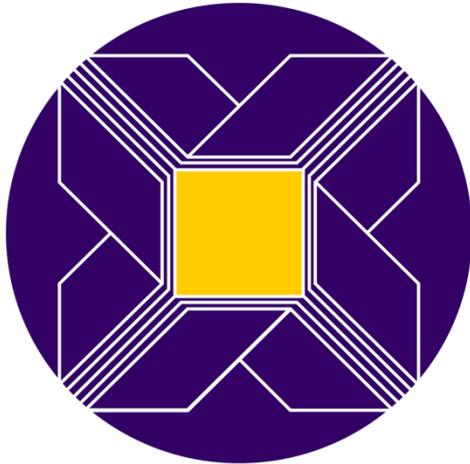


- Membership: 125 comprehensive, research-extensive institutions in the US and Canada
- Mission: influence the changing environment of scholarly communication and the public policies that affect research libraries and the diverse communities they serve.





## Introductions - ARL's Statistics and Assessment Program



- ... focus on articulating the value of research libraries by describing and measuring their performance and contributions to research, scholarship, and community service.
- ...leadership role in the development, testing, and application of academic library statistics, performance measures, qualitative and quantitative methods, benchmarking, analytics and management tools.
- ...supports the sharing of business intelligence among research libraries.
- ... resources are available to all academic and research libraries through strategic partnerships, cooperative actions and collaborative research.



## Assessment Quandary...

“The difficulty lies in trying to find a single model or set of simple indicators that can be used by different institutions, and that will compare something across large groups that is by definition only locally applicable—i.e., how well a library meets the needs of its institution. Librarians have either made do with oversimplified national data or have undertaken customized local evaluations of effectiveness, but there has not been devised an effective way to link the two.”

Sarah Pritchard, *Library Trends*, 1996



## Introductions - StatsQUAL®



- Gateway to library assessment tools that describe the role, character, and impact of physical and digital libraries.
- Interactive framework that integrates and enhances data mining and presentation both within and across institutions

Many tools + One unified database =  
Myriad opportunities for longitudinal and cross-institutional comparisons



## Assessment Tools At – a – Glance



### **ARL Statistics (since 1907-08)**

A series of annual surveys that describe the collections, expenditures, staffing, and service activities for ARL member libraries (includes Law, Health Sciences and Salary surveys).

[www.arlstatistics.org](http://www.arlstatistics.org)



### **LibQUAL+® (launched 2000, FIPSE grant 2000-2003, NSF 2002-2006)**

A suite of services used by libraries to solicit, track, understand, and act upon users' opinions of service quality.

[www.libqual.org](http://www.libqual.org)



### **MINES for Libraries ® (launched 2005)**

An online transaction-based survey that collects data on the purpose of use of electronic resources and the demographics of users

[www.minesforlibraries.org](http://www.minesforlibraries.org)



### **ClimateQUAL® (launched 2007)**

An assessment of library staff perceptions concerning (a) their library's commitment to the principles of diversity, (b) organizational policies and procedures, and (c) staff attitudes.

[www.climatequal.org](http://www.climatequal.org)



### **LibValue (IMLS grant 2009 - 2012)**

An ongoing three year project funded by IMLS aimed at developing a customizable set of models for determining value and ROI at academic libraries

[www.libvalue.org](http://www.libvalue.org)



# LibQUAL+® - Basics

- A suite of services used by libraries to solicit, track, understand, and act upon users' opinions of service quality
- Based on the service quality framework SERVQUAL - “...only customers judge quality; all other judgments are essentially irrelevant.” -- Note. Zeithaml, Parasuraman, Berry. (1999). Delivering quality service. NY: The Free Press

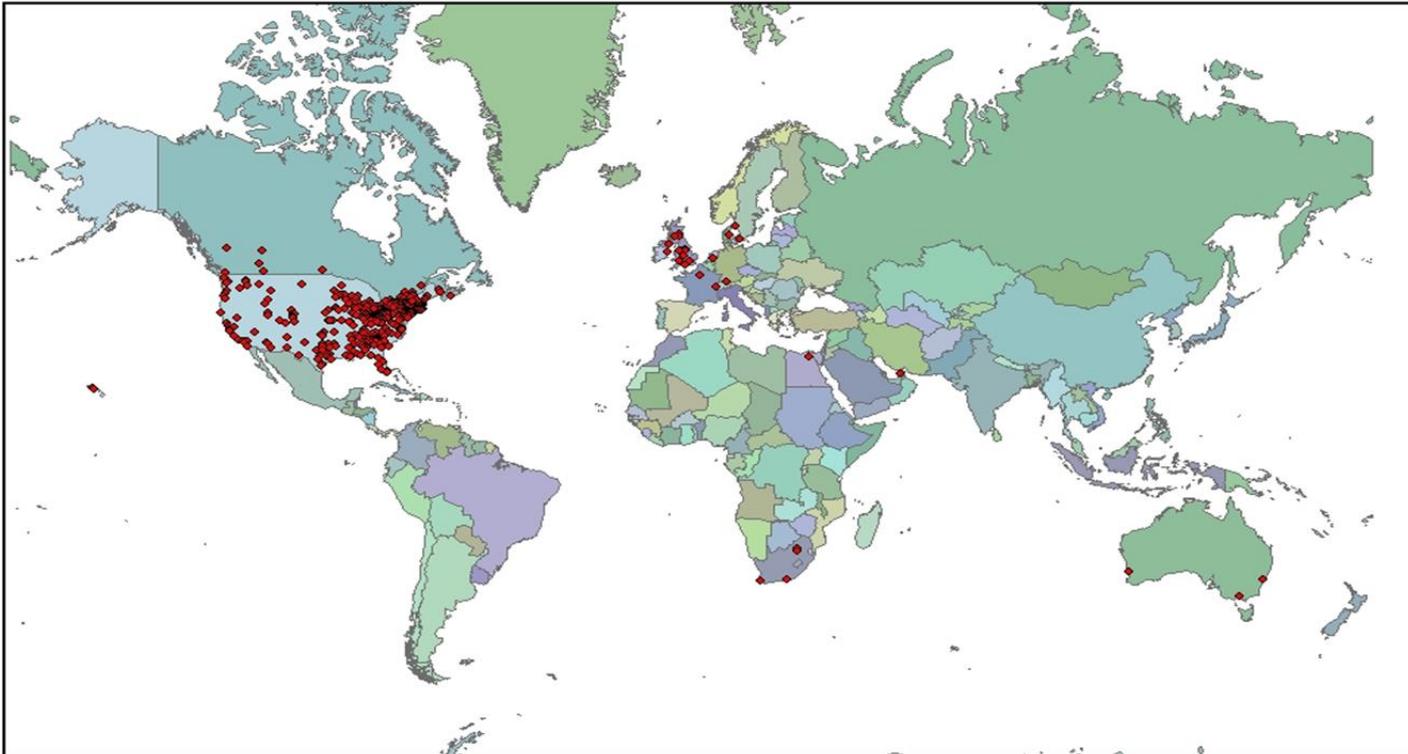
- 
- 22 core questions covering three dimensions
    - Affect of Service
    - Library as Place
    - Information Control
  - Optional 5 ‘local’ questions
  - Comments box

When it comes to...	My Minimum Service Level Is		My Desired Service Level Is		Perceived Service Performance Is		
	Low	High	Low	High	Low	High	
1) Employees who instill confidence in users	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> N/A
2) Making electronic resources accessible from my home or office	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> N/A
3) Library space that inspires study and learning	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> N/A
4) Giving users individual attention	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> N/A
5) A library Web site enabling me to locate information on my own	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	○ 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> N/A



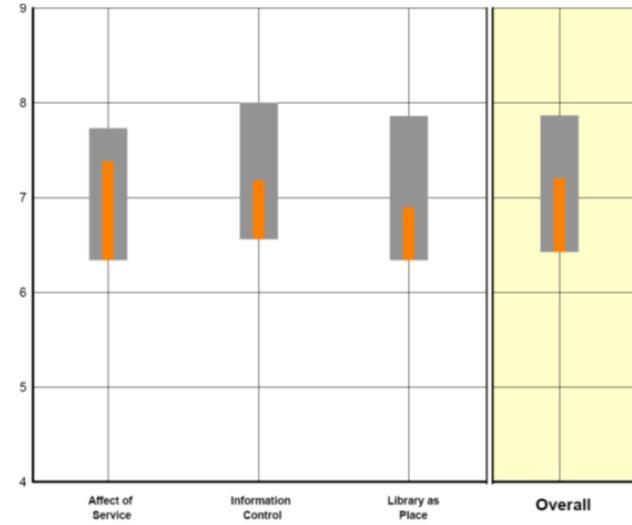
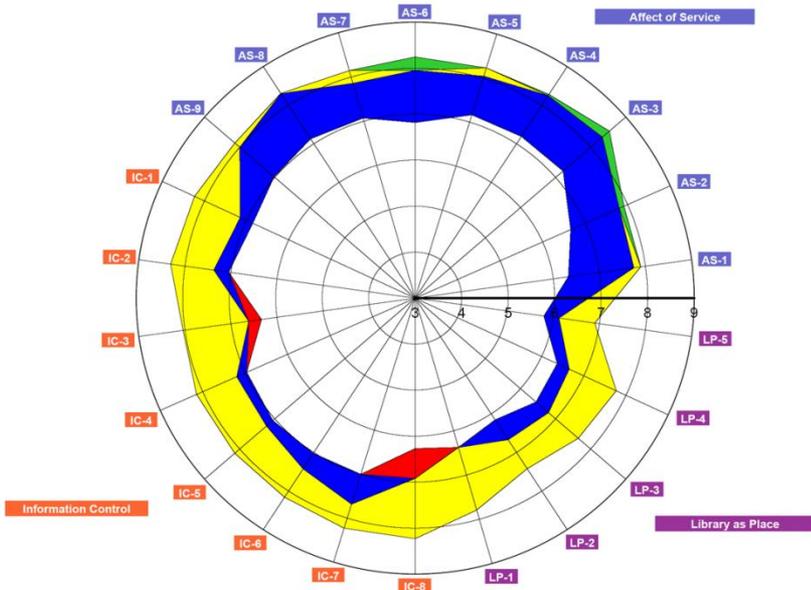
## LibQUAL+® - Global Reach

Through 2012: over 2000 institutional surveys, at over 1200 institutions, in 28 countries, 21 languages, and over 1.7 million survey respondents.



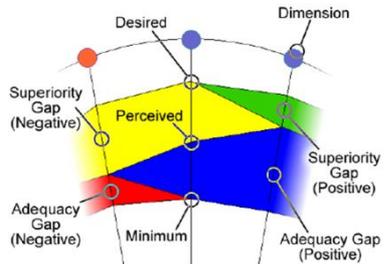


# LibQUAL+® - Survey Deliverables: Results Notebook

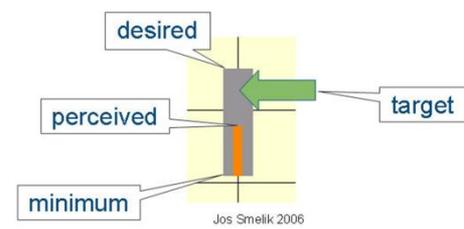


Range of Minimum to Desired  
 Range of Minimum to Perceived ("Adequacy Gap")

## Core Question Summary



## Core Dimension Summary



Jos Smelik 2006



# LibQUAL+® - Additional Services

## Analytics

Disseminating Results | Data Explorer

Welcome to the remodeled Analytics. The modules you are familiar with (Institution Explorer and Longitudinal Analysis) now act in unison to provide you with a one-stop dynamic shop to interactively analyze your results and benchmark with other institutions.

Just a few brief words to help you get started... After choosing the institution and years of interest, you will be transported to the data display. You can refine the data by selecting specific User Groups and Disciplines and clicking "Update" to refresh the tables and charts. When you are ready to explore a new institution or particular years, just click "Back" above the data settings (not on your browser).

Be sure to try "Download this Data" to manipulate the data further in your preferred software and "Enlarge" for an improved view of the charts (right-click and save to place the chart in your own reports!).

[Back](#)

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**Settings**

User Groups	Disciplines	Surveys
<input checked="" type="checkbox"/> Undergraduate	<input checked="" type="checkbox"/> Agriculture / Environmental Studies	<input type="checkbox"/> Aalto University (LQ 2010 - Finnish, English (Finnish))
<input checked="" type="checkbox"/> Graduate	<input checked="" type="checkbox"/> Architecture	<input type="checkbox"/> Aalto University (LQ 2012 - Finnish, English (Finnish))
<input checked="" type="checkbox"/> Faculty	<input checked="" type="checkbox"/> Business	<input type="checkbox"/> Aalto University: Helsinki
<input checked="" type="checkbox"/> Library Staff	<input checked="" type="checkbox"/> Communications / Journalism	
<input checked="" type="checkbox"/> Staff	<input checked="" type="checkbox"/> Education	

[Update](#)

## Analytics

- Access to institutional data (in the years you've participated - subscription available for access to all years)
- Ability to parse results by different combinations of user and discipline groups
- Longitudinal and cross-institutional analysis possible

## Data Repository

- Access to written reports (your own as well as other institutions who ran surveys in the same year)
- Access to your raw data for more specialized self-analysis
- Access to specialized analysis reports (segmented by library branch, customized discipline, or other desired grouping) if ordered

Institution	Report	Custom Report	Print Surveys	Summary	Representativeness	Raw Data	Data Keys	SPSS Syntax	Comments
Aalto University									



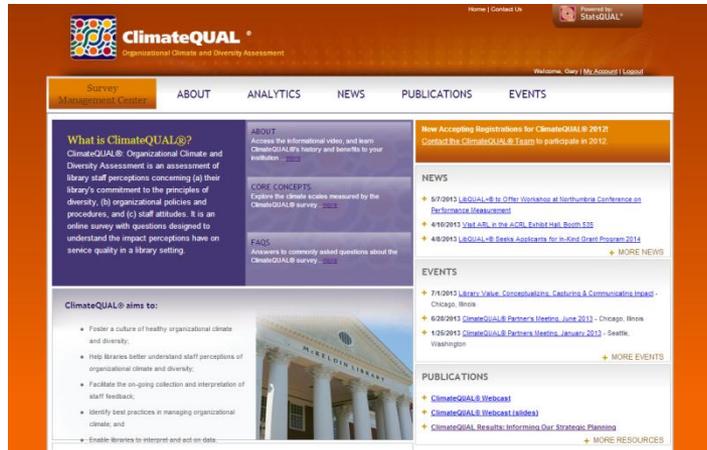
## LibQUAL+® - Ongoing Enhancements



- **LQ Lite** (2008) – uses item sampling methods to (a) gather data on all 22 LibQUAL+® core items, while (b) only requiring given individual users to respond to a subset of the 22 core questions (8 questions).
- **Ability to customize the Position/User Group variable** (2013) - useful when a library, for example, wants to survey only undergraduates in a specific year and would like to delete the other user group categories; it is also useful if a library wants to rename terms, for example, 'First Year' into 'Freshman'.
- **Accessibility Enhancements** (2013/2014)
- **Mobile-friendly survey form** (2013)



# ClimateQUAL® - Basics



Measures library staff perceptions concerning:

- (a) their library's commitment to the principles of diversity
- (b) organizational policies and procedures
- (c) staff attitudes

Origins: a 1999 partnership between the University of Maryland Libraries and the university's Industrial and Organizational Psychology program to develop an assessment of the climate and culture at the library.

## ClimateQUAL® aims to:

- Foster a culture of healthy organizational climate and diversity
- Help libraries better understand staff perceptions of organizational climate and diversity
- Facilitate the on-going collection and interpretation of staff feedback
- Identify best practices in managing organizational climate
- Enable libraries to interpret and act on data



## ClimateQUAL® - Basics

Web-based survey of approximately 150 questions representing:

- 9 Climate Dimensions
- 7 Organizational Attitude Scales
- Additional demographic questions
- Free text comments box



## ClimateQUAL® - Dimensions

### Climate Dimensions

- **Deep Diversity** - *“This organization values the different perspectives that employees bring to the workplace”*
- **Psychological Safety** - *“As an employee in this library one is able to bring up problems and tough issues”*
- **Justice** – *“Do the rewards in your division reflect the effort that division members put into their work”*
- **Innovation** - *“Co-workers tell each other about other new information that can be used to increase job performance”*
- **Continual Learning** - *“There is excellent on-the-job training”*
- **Leadership**
- **Teamwork** - *“Teamwork is important to completing work in this organization”*
- **Demographic Diversity** - *“The [race/gender/rank/sexual orientation] of a team/work unit member does NOT affect how they are valued on this team/work unit”*
- **Customer Service**



## ClimateQUAL® - Dimensions

### Organizational Attitude Scales

- **Task Engagement** - *“The work I do is very important to me”*
- **Organizational Commitment** - *“I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful”*
- **Organizational Citizenship Behaviors** - *“Give up time to help others who have work or non-work problems”*
- **Organizational Withdrawal** - *“How often do you explore other job opportunities by checking job listings or want ads”*
- **Job Satisfaction**
- **Team Psychological Empowerment in the Workplace** - *“My impact on what happens in my team/work unit is large”*
- **Work Unit Conflict** - *“How much jealousy or rivalry is there among members of your unit”*



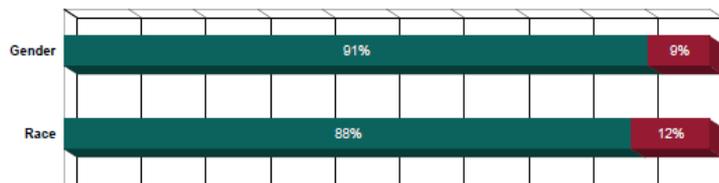
# Survey Deliverables – Results Report

Your designated team/division is (Standard):

	Frequency	Percent (%)
Administrative Services	17	8.90
Public Services and Instruction	61	31.94
Technical Services	31	16.23

## Demographic Summary

Climate for Demographic Diversity



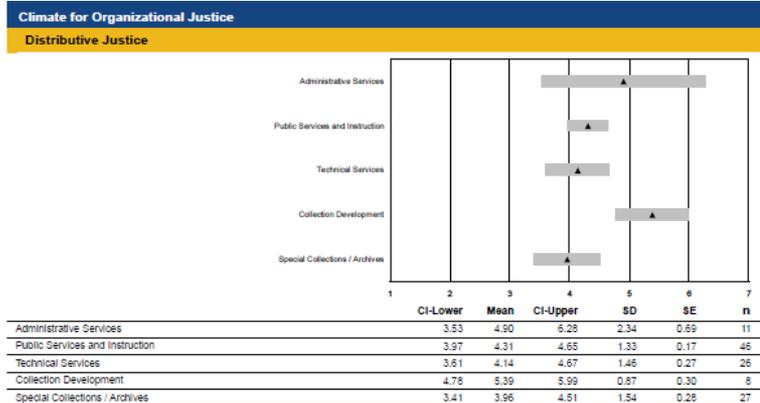
## Percent Agreement



## User Comments

	Mean	Standard Deviation	Standard Error	n
<b>Climate for Organizational Justice</b>				
Distributive Justice	4.28	1.53	0.08	121
Procedural Justice	4.78	1.81	0.11	99

## Scale Descriptive Stats



## Demographic Means on Climate and Attitude Scales



# MINES for Libraries® - Basics

**Measuring the Impact of Networked Electronic Services (MINES)** - an online, transaction-based survey that collects data on the purpose of use of electronic resources and on the demographics of users.

**Origins** – developed by Brinley Franklin and Terry Plum as on-line survey supplement to a library cost analysis study originally developed in the 1980s. Since becoming one of ARL's new measures tools in 2003, it has been administered to more than 50 libraries and more than 100,000 users

## Why use MINES for Libraries®?

- Measure the value and impact of digital content
- Determine how specific user populations apply digital content to their work, based on demographic and purpose of use analyses
- Identify where library use originates in the networked environment and tailor services accordingly
- Gather digital collections use data to justify increased funding for digital content and to make informed collection development decisions
- Assign a monetary value for the amount of an academic library's networked service costs that support funded research, instruction, patient care, public service, and other activities
- Assess the impact of networked electronic resources and services on teaching, learning, and research



## MINES for Libraries® - Basics

### MINES for Libraries® collects information on:

- Patron status (relationship with the institution)
- Affiliation (academic discipline)
- Location (where resource was requested)
- Purpose (reason for requesting resource)
- Resource being requested



#### UConn Library Electronic Services Web Survey

This survey is being conducted during a **two-hour** time period by the University of Connecticut to assess the usage of the Library's electronic services. **All responses are anonymous.** The data is critical for obtaining continued funding.

After completing the survey, you will be connected to the service you selected.

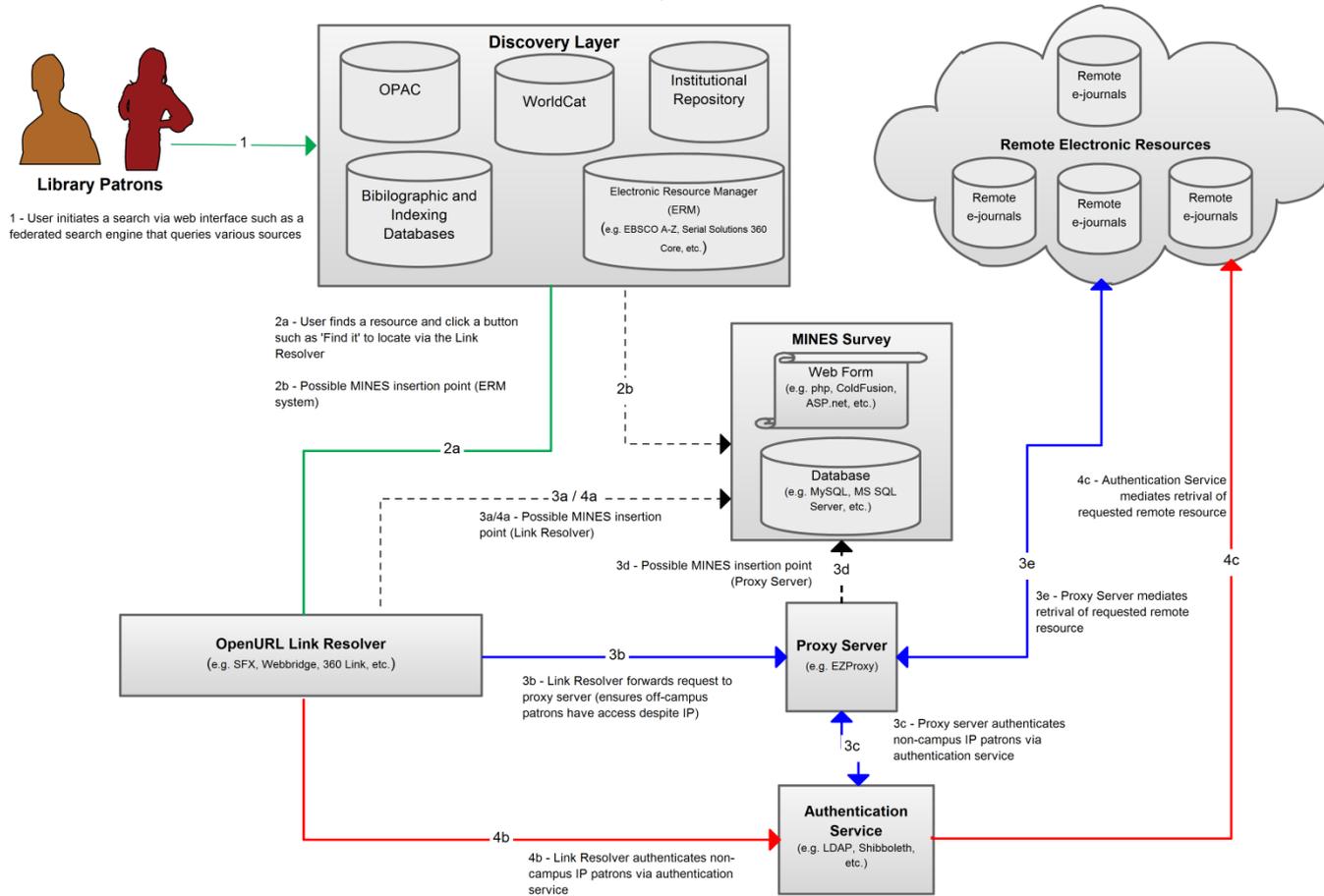
Thank you for your help.

<b>Patron Status</b>	Select Patron Status
<b>Affiliation</b>	Select Affiliation
<b>Location</b>	Select Location
<b>Purpose for Using this Electronic Resource:</b>	<input type="radio"/> Sponsored (Funded) Research <a href="#">Definition</a>
	<input type="radio"/> Instruction/Education/Departmental (Non-Funded) Research <a href="#">Definition</a>
	<input type="radio"/> Other Activities <a href="#">Definition</a>
	<input type="button" value="Submit Survey"/>



# MINES for Libraries® - Implementation Considerations

## MINES for Libraries® Architecture *in context of library automation infrastructure*





## MINES for Libraries® - Implementation Considerations

### Sampling Plan Options

- Random moment – requires ‘session’, difficult to implement
- Every n-th sampling plan - Session IDs are no longer needed: easier implementation, less ethical issues

### Mandatory vs. Optional Versions

- Ethics review board may object to mandatory
- Research (implementation at OCUL institutions) shows no significant difference in results between mandatory vs. optional



# Survey Deliverables – Results Report

## 4 Frequency by Purpose

	n	%
Assignment (students)	913	59.02%
Non-funded research	151	9.76%
Other activities including personal interest	172	11.12%

## Frequencies

## 14 Purpose by Status

Assignment (students)	n	% of Group	% of All
Community	1	0.11	0.06
Faculty	1	0.11	0.06
Graduate Student	354	38.77	22.88

## Crosstabs



## User Comments



# LibValue - Basics

- Three year (started December 2009) project funded by IMLS aimed at developing a customizable set of models for determining value and ROI in academic libraries
- Origins - Carol Tenopir (UT) & Paula Kaufman (UIUC) with other researchers at University of Tennessee, University of Illinois at Urban-Champaign, Syracuse University, and ARL

## LibValue's Aim:

Identify and measure the library's contribution to institutional success and how well it meets the ever changing needs and expectations of its users



# LibValue - Methodology

Figure 1. Map of Functional Areas



Results of literature review

## ARL Assessment Tools



## LibValue Projects





## LibValue Studies (examples)

- **Books and E-books** – (Tina Chrzastowski, Wendy Shelburne, and Paula Kaufman of UIUC) Incorporating a portion of the Elsevier E-books Use and Value Study conducted at UIUC and other institutions, this study looked at the value of e-books as used by faculty and graduate students; how that value differs between those two groups and by publisher and subject; and how e-books were used by institutional users.
- **Information Commons** – (Gayle Baker, Teresa Walker, and Ken Wise of UT) Examines how the information commons' spaces and services contribute to student success on multiple levels, as well as how commons are utilized by instructors and how they affect teaching outcomes.
- **Comprehensive Library** – (Bruce Kingma of Syracuse) Examines the environmental value of the library finding, for example, that providing online resources may yield savings in transportation and paper as users access collections from home and on their screens.
- **Reading and Scholarship** – (Carol Tenopir and Donald King of UT) An update of a cost and readership study at the University of Pittsburgh, first done in 2002–2004, that investigates the use of library collections. In addition to collecting longitudinal data that will give an invaluable snapshot of the rapid changes in the processes and functioning of the library as well as the impact of these changes on costs, this study looked at how library journal collections affect the success and productivity of faculty and students.



## Other Services

### Assessment Community

- Library Assessment Blog - [www.libraryassessment.info](http://www.libraryassessment.info)
- ARL Assess Listserv - <http://groups.google.com/a/arل.org/group/arل-assess>

### Events

- **Library Assessment Conference** (<http://www.libraryassessment.org/>) - a biennial event gathering a vibrant community of practitioners and researchers engaged with the noble mission of demonstrating the value of the library in today's ever-changing environment.
- **Service Quality Evaluation Academy** - an intensive five-day program that focuses on introductory qualitative and quantitative methods for collecting and analyzing library service quality data.
- **Various webcasts and workshops** – see <http://www.arل.org/events>