

Truing the Wheel

Designing a refined
taxonomy for virtual
reference services in
academic libraries



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Galvin's Virtual Reference

Consists of Email, online form submitted via email, and Instant Messaging (IM).



Galvin's IM

Instant Messaging conducted two ways:

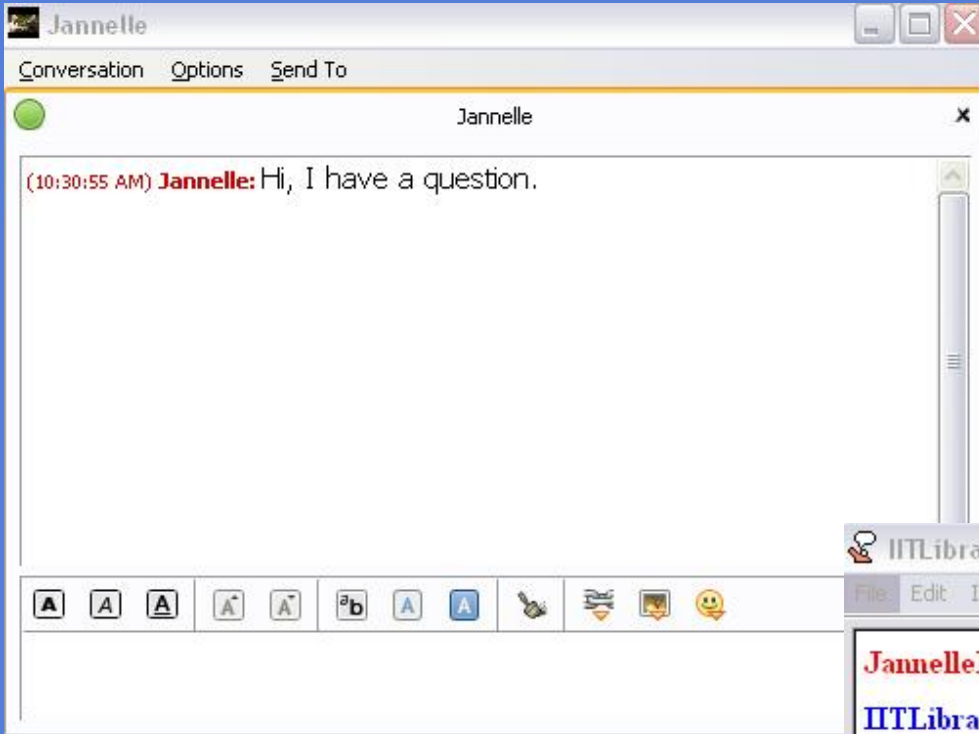
- GAIM (now known as Pidgin)- an IM Client aggregator, with screen names for Google Talk, AIM, Yahoo! and MSN
- Meebo - a widget placed directly on the Ask A Librarian site that does not require the user to have an IM account



Virtual Reference

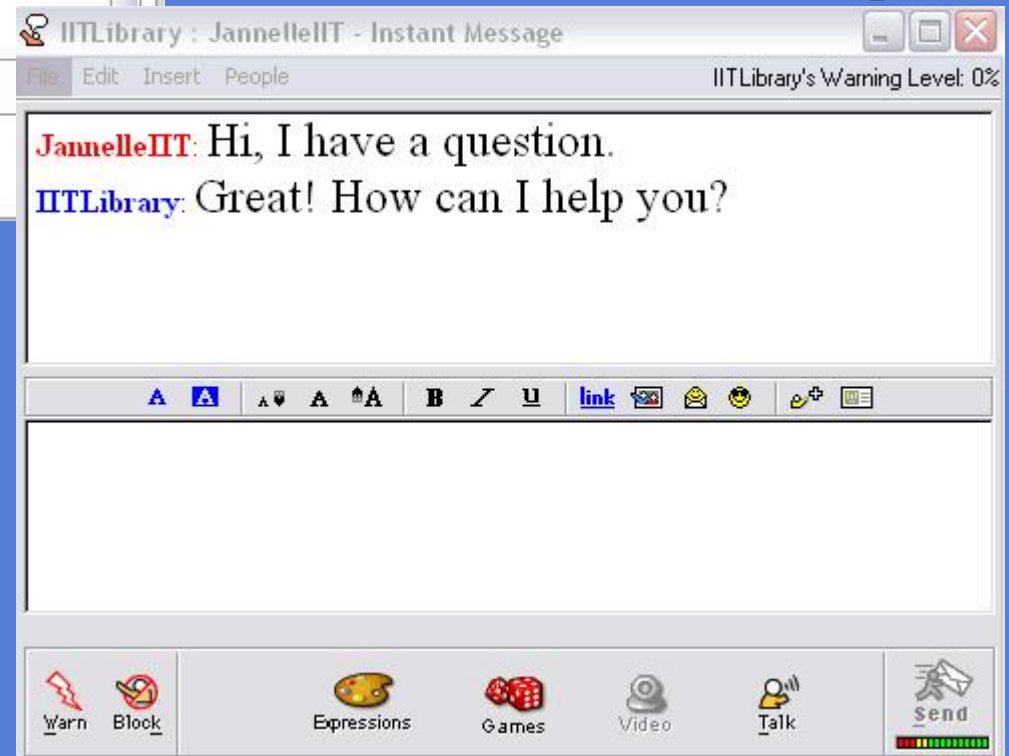
1. Librarian's Screen

Librarian receives IM from patron



2. Patron's Screen

Patron receives librarian's response



Troubles with Taxonomies



Hypothesis:

Traditional taxonomies for defining
reference questions are ill-suited for
Virtual Reference.

Over the past 15 years, reference services have changed.
Let's take a look at traditional reference question
taxonomies in light of the new virtual services.



Traditional Taxonomies

William Katz's question categorization:

1. Ready Reference – Who is the Mayor of Detroit?
2. Specific Search – Do you have a copy of *Gravity's Rainbow*?
3. Extended Research – In-depth research assistance on a topic.



Katz, William A. *Introduction to Reference Work*. 5th ed. Boston: McGraw-Hill, 1987.



Traditional Taxonomies

JoAnn Sears expanded Katz's taxonomy to include:

4. Library Policy – How many books can I check out?
5. Directional – Where are the restrooms?



Sears, JoAnn. "Chat Reference Service: An Analysis of One Semester's Data," *Issues in Science and Technology Librarianship* (Fall 2001).



Galvin's Taxonomy

Major Categories:

1. Searching – using catalog, internet, or database to find materials
2. Instructing – instructing how to do any library-related task
3. Routing – providing directions to physical locations
4. Escorting – walking with patron to physical location
5. Fetching – retrieving item for patron
6. Troubleshooting – repairing technical glitches or hardware issues
7. Maintaining – refilling office supplies, general cleaning
8. Granting – providing keys to the GIS lab, checking out special materials
9. Disseminating – giving information about various library policies, hours



Galvin's Taxonomy

Galvin uses a custom-designed Microsoft Access database, called RefStats that expands on the traditional taxonomy.

- Accounts for the uncertainty in patron's request or question
- Details what services are provided in each transaction
- Contains 9 broad categories with sub-categories in each



RefStats Front Page

The Basics Searching Instructing Routing Escorting Fetching Troubleshooting Maintaining Granting Disseminating Comments

Status

- Alumnus
- Community
- Faculty
- Graduate
- IITRI
- Staff
- Student
- Undergrad
- Unknown

Mode

- In Person
- Telephone
- Email
- IM

Patron

- IIT
- Affiliate
- Guest
- Unknown

Location

- Reference Desk
- Reference Office
- Other

Duration

- 1 Minute
- 2 Minutes
- 3 Minutes
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 30 Minutes
- 45 Minutes
- 1 Hour

Repeat Patron

Textbook Question

Lost and Found Inquiry

Staff Member

- Aric
- Carol
- Charles
- Christopher
- Eben
- Jannelle
- Jeanne
- John
- Kelly
- Liana
- Pattie
- Shakia
- Stephanie
- Student

Campuswide Printing Down

Discipline

- Architecture
- Biology
- Biomedical
- Business
- CAE
- ChemE
- Chemistry
- CS
- Design
- ECE
- ENVE
- Humanities
- Math
- MMAE
- MSED
- Physics
- Psychology
- Public Admin
- Social Science
- Unknown

Assisted by:

- No One
- Aric
- Carol
- Charles
- Eben
- Jannelle
- Jeanne
- John
- Shakia
- Student
- Access Services
- Admin
- ARC
- Archives
- CDC
- GRC
- LTG
- Technical Services

Handed Off to:

- No One
- Aric
- Carol
- Charles
- Eben
- Jannelle
- Jeanne
- John
- Shakia
- Student
- Access Services
- Admin
- ARC
- Archives
- CDC
- GRC
- LTG
- Technical Services

Other Action

- None
- Searching
- Instructing
- Routing
- Escorting
- Fetching
- Troubleshooting
- Maintaining
- Granting
- Disseminating

Other Object

- None
- Software
- Authentication
- ILL
- Hardware
- Collections
- Unit
- Facilities
- Policies

Other Description:

Jannelle

Submit

Date: 5/25/2007

Time: 10:48:45 AM



Method



Method

Setting

- Added new virtual reference services
 - Rolled out IM reference
 - Added new email address reference@iit.edu
- Revamped [Ask a Librarian](#) page
- Publicized IM reference



Method

Process

- Study period was set as February 1-March 31, 2007
- Chat transcripts and emails automatically saved
- After the study period:
 - Read and classified all emails and chat transcriptions
 - Pulled RefStats data for February and March



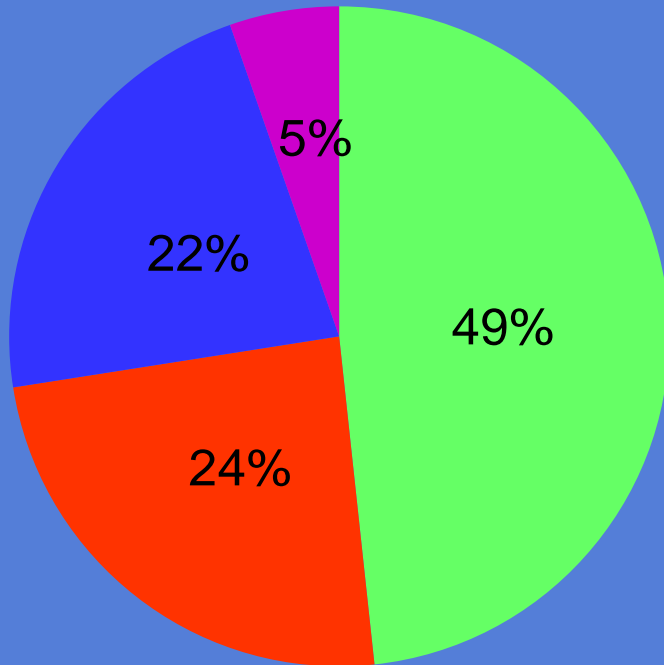
Data Collection



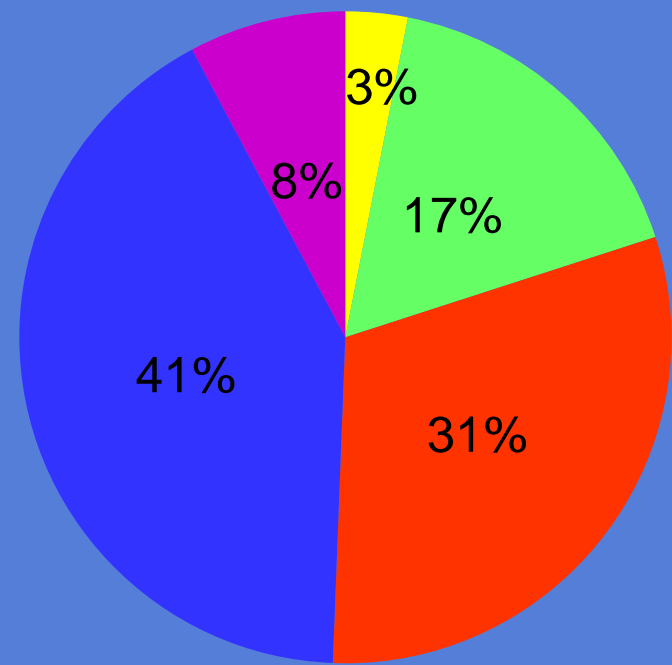
Data Collection

Traditional – Katz & Sears

VR



In Person



Ready Reference

Specific Search

Extended Research

Directional

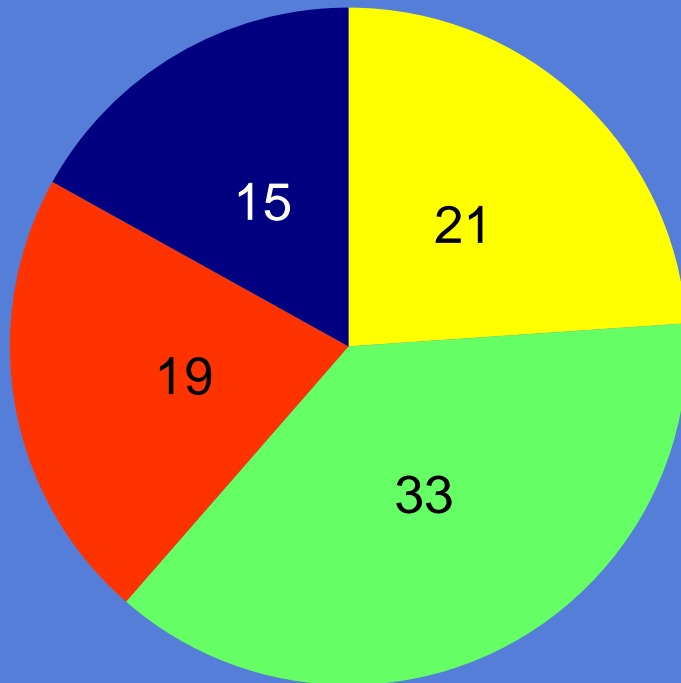
Library Policy



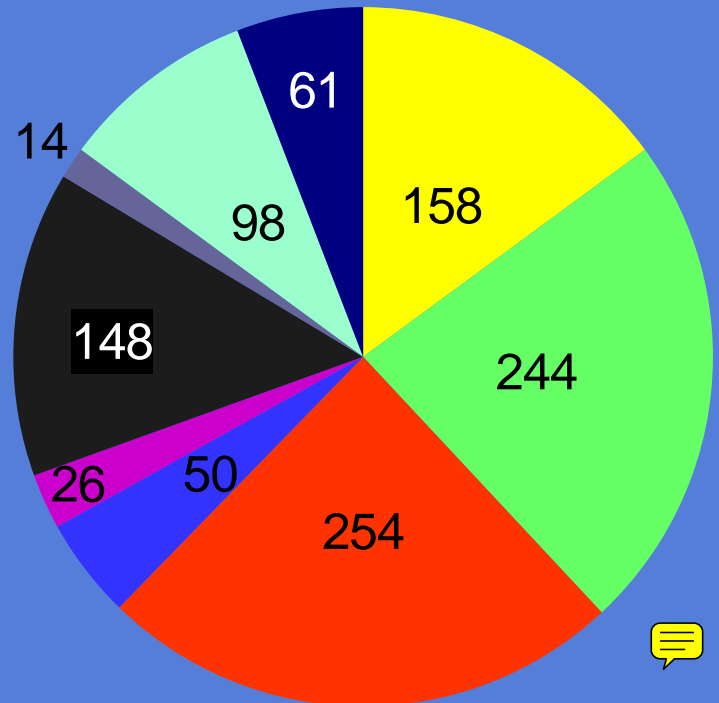
Data Collection

Galvin

VR



In Person

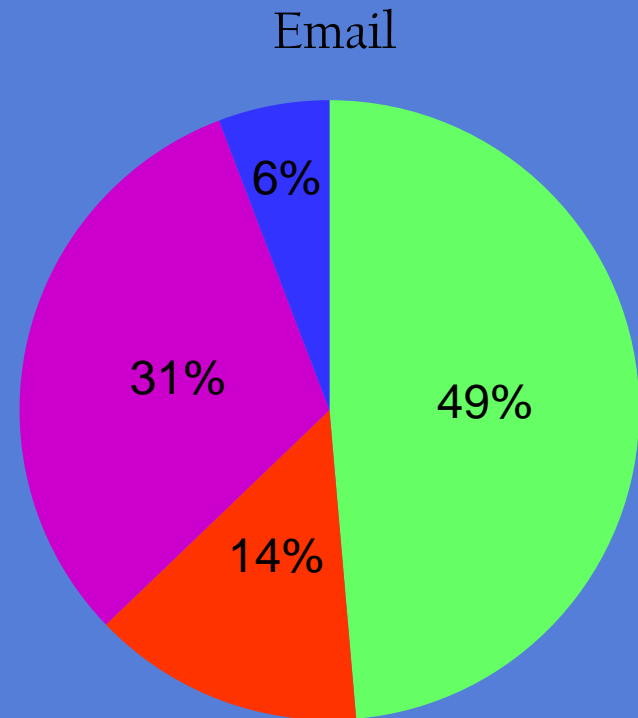
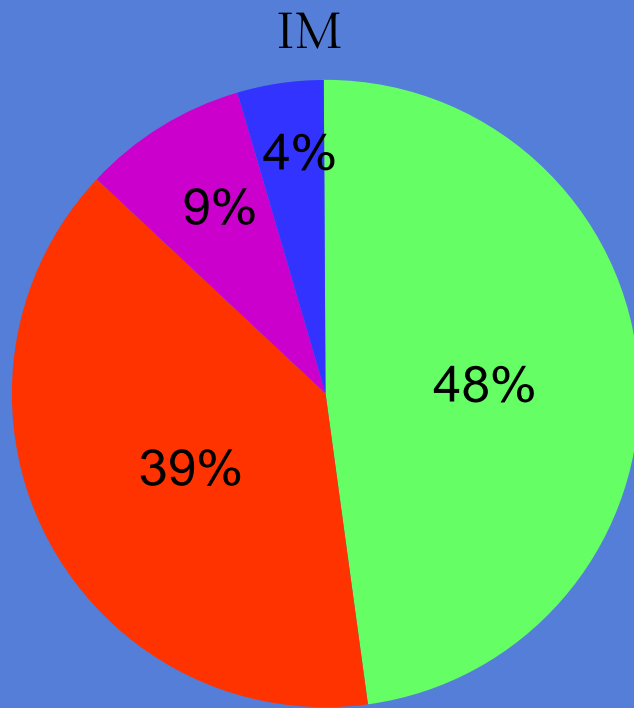


- Searching
- Instructing
- Routing
- Escorting
- Fetching
- Troubleshooting
- Maintaining
- Granting
- Disseminating

*Values are actual counts

Data Collection

Traditional – Katz & Sears



Ready Reference

Directional

Specific Search

Library Policy

Extended Research



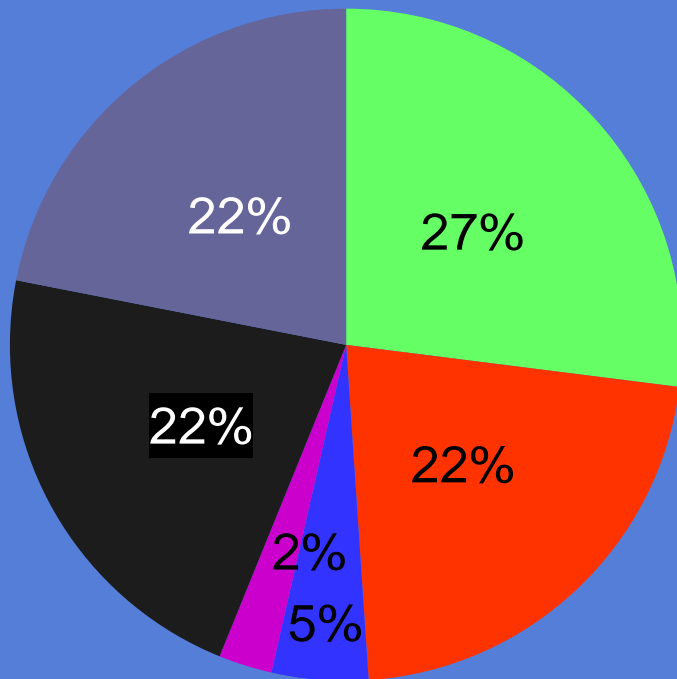
Traditional taxonomies are designed for direct contact with a patron. The use of virtual reference and electronic resources create a need for categorizing ancillary transactions.

- Technical difficulties
- Misuse or abuse
- Assistance with advanced electronic resources



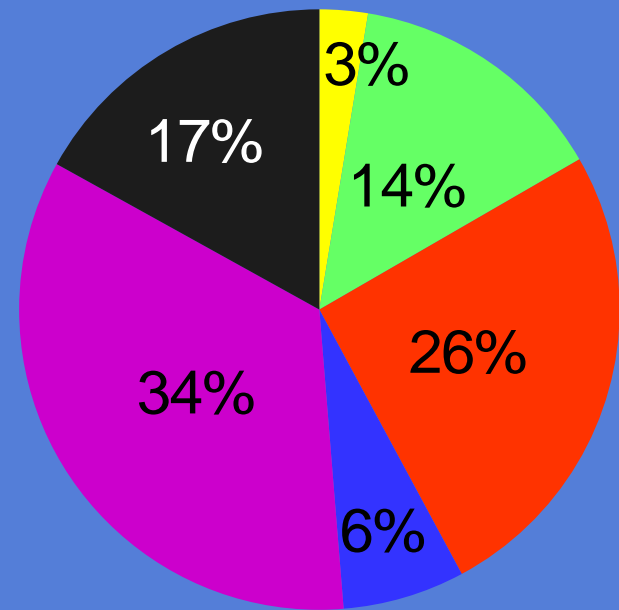
Updated Taxonomy

IM



- Ready Reference
- Extended Research
- Directional
- Misuse/Abuse

In Person



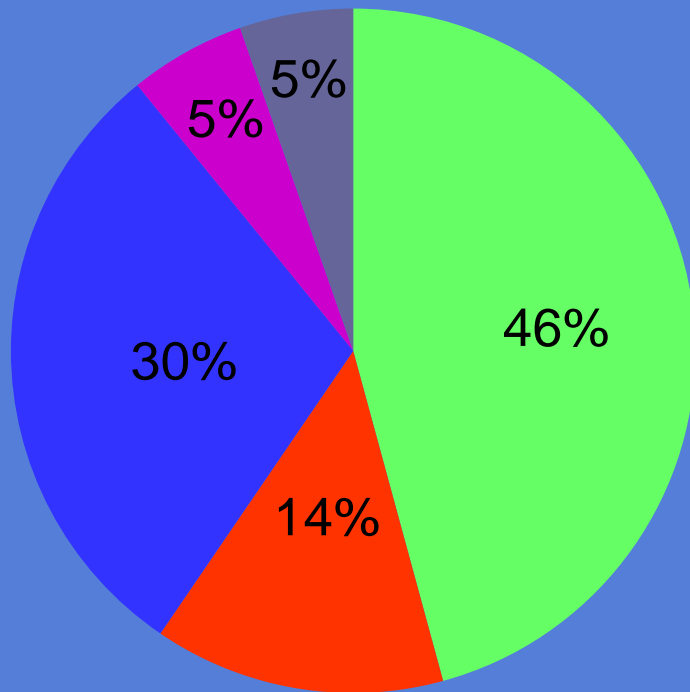
- Specific Search
- Library Policy
- Technical Difficulty/Disconnect
- Extended Research
- Ready Reference



Data Collection

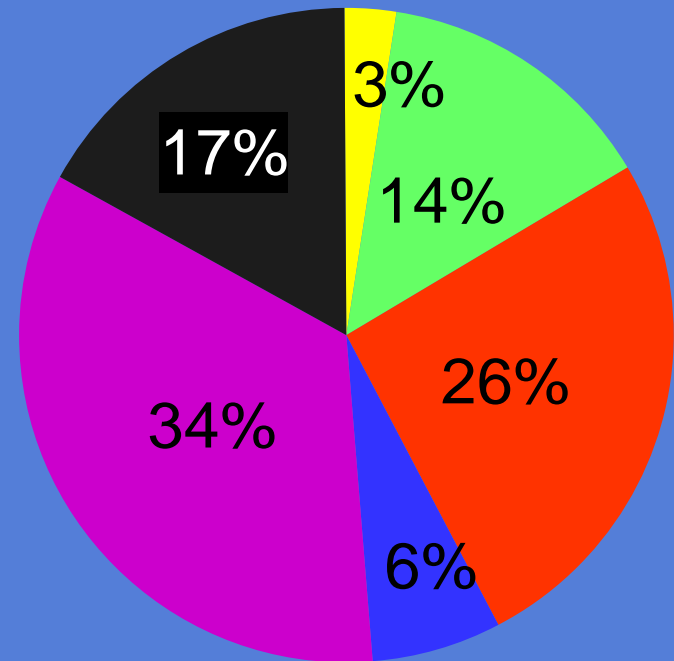
Updated Taxonomy

Email



- Ready Reference
- Extended Research
- Directional
- Misuse/Abuse

In Person



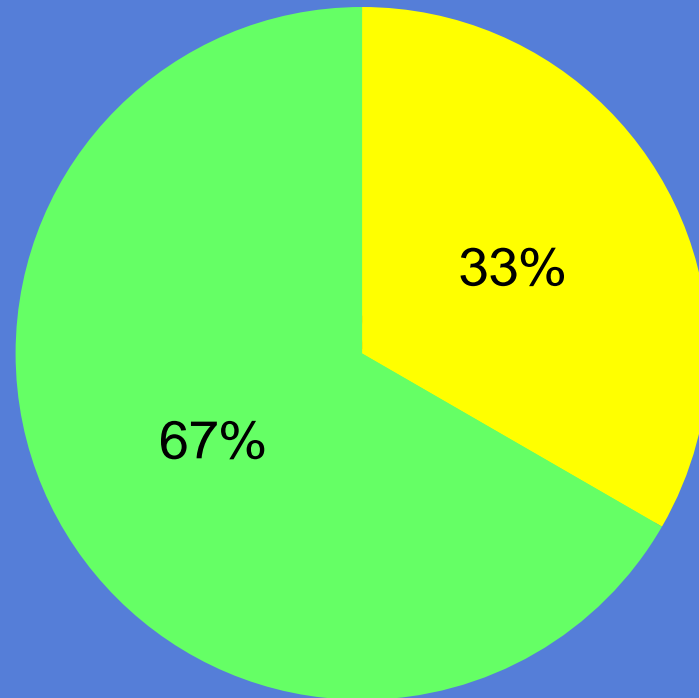
- Specific Search
- Library Policy
- Technical Difficulty/Disconnect
- Extended Research



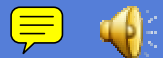
Data Collection

Extended Reference

IM



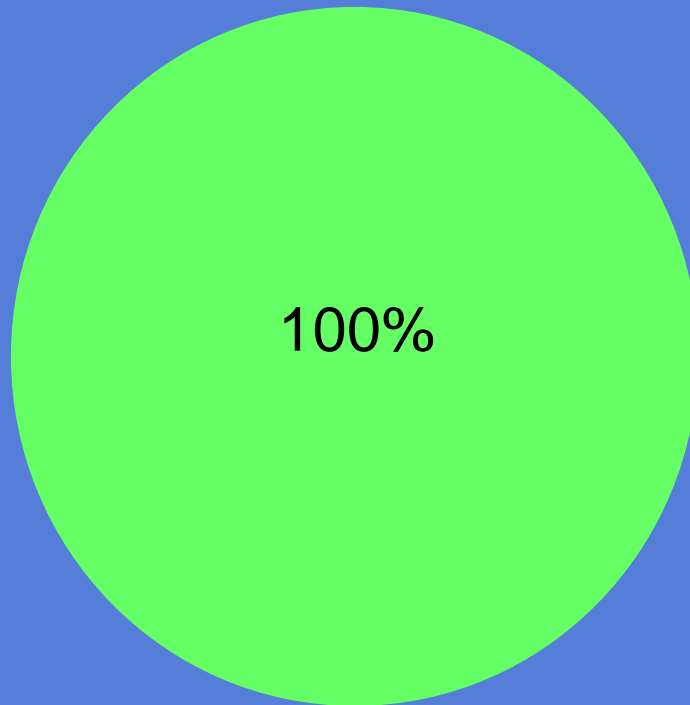
■ Tool ■ Subject



Data Collection

Extended Reference

Email



■ Tool ■ Subject



Data Collection

Notable Figures

- 87% of IM questions are specific search or extended research in the traditional taxonomy
 - 49% with our new categories
 - New categories had lesser impact on Email questions
- 78% of extended research questions in virtual reference are subject-based



- 31% of Email questions are library policy compared to 9% in IM



Discussion

Aspects of the study that worked well

- Automatic logging of transcripts simple and effective
- Established in person statistical tracker made comparing data easy



Discussion

What we would do differently next time

- Extend study period to include different times in the semester
- Conduct study on an established IM reference service



Conclusions



Conclusions

- Technical difficulties are a factor in IM reference, and change the distribution of transaction types greatly when accounted for in the traditional taxonomy
- The impersonal nature of virtual communication leads to more misuse of reference services
 - We see a higher proportion of research questions using virtual reference than in person



Conclusions

- Traditional taxonomy could split extended reference category between extended reference in a tool and in a subject
- New taxonomies must account for technical problems in virtual reference, as they take up a large amount of time
- Ready reference category is obsolete in virtual reference



Suggested New Taxonomy for Virtual Reference

- Specific Search – Search for a specific title
- Extended Research on a tool – In-depth assistance in the use of a research tool
- Extended Research on a subject – In-depth assistance on a subject
- Technical Difficulty – disconnects, returned e-mails
- Misuse – non-IIT related questions, abusive language, spam

- Library Policy

- Directional



Conclusions

What to do with all this information?

- Create circulation desk email assistance
- Evaluate peak usage times and adjust librarians' schedules accordingly
- Train staff based on the types of question most received



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