

LLAP Reflections and Moving Forward

LG-96-18-0040-18

May 27, 2021

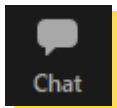
Zoom Webinar Features

- Audio and Video will be muted for all Participants upon entry
- Switch between Speaker View and Gallery View
- Chat is enabled
- Q&A is enabled
- Raise Hand feature will be utilized
- Live Transcripts/Closed Captioning are available

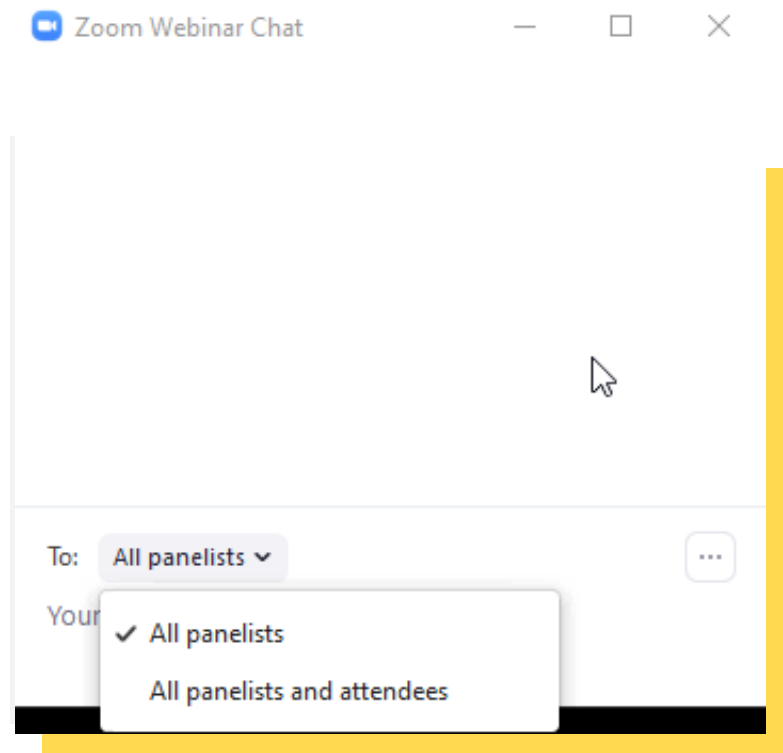
Chat

Use Chat for discussion or support

To open the Chat window, click the Chat button at the bottom of the Zoom application



By clicking the ... button in the Chat pop out window, you can select who you want to chat with



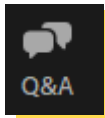
Picture of the Zoom Chat pop out window with the audience options shown

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Q&A

Use Q&A to ask questions to the panelists and presenters

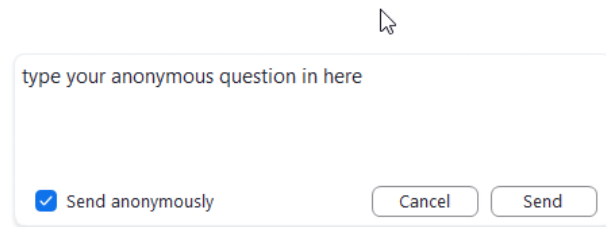
To open the Q&A window, click the Q&A button at the bottom of the Zoom application



To send an anonymous question, type your question in the box and click the “Send anonymously” button

Welcome

Feel free to ask the host and panelists questions

A screenshot of the Zoom Q&A pop-out window. It features a text input field with the placeholder text "type your anonymous question in here". Below the input field, there is a checkbox labeled "Send anonymously" which is checked. To the right of the checkbox are two buttons: "Cancel" and "Send".

type your anonymous question in here

☒ Send anonymously

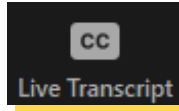
Cancel Send

Picture of the Zoom Q&A pop out window with the Send anonymously box checked

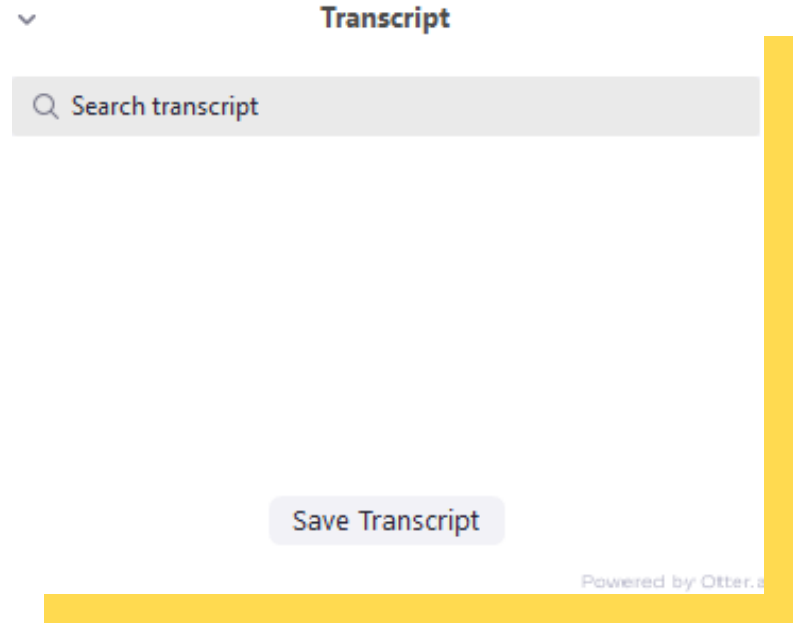
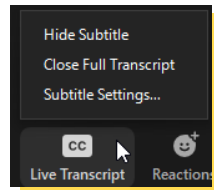
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Live Transcript (CC)

Use the “Live Transcript” icon to turn off/on the Closed Captioning.



Clicking on the “Live Transcript” icon also gives you the option to Hide Subtitles, open/close the Full Transcript and open the Subtitle Settings



Picture of the Live Transcript, “Full Transcript” pop out window with the “Save Transcript” and “Search Transcript” options.

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THE LIBRARY LEARNING ANALYTICS PROJECT (LLAP)

<https://libraryanalytics.org/>

“The Impact of the Academic Library on Learning in the University,” LG-96-18-0040-18,
National Leadership Grant, Institute of Museum and Library Services

A COLLABORATIVE & INTERDISCIPLINARY APPROACH TO LIBRARY LEARNING ANALYTICS



THE OHIO STATE UNIVERSITY
UNIVERSITY LIBRARIES



NORTHWESTERN
UNIVERSITY



Washtenaw
Community College
Higher ed in the heart of Ann Arbor, Michigan

New England College
H. R. Danforth Library



UNIVERSITY LIBRARY
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



OAKLAND
COMMUNITY
COLLEGE®



UNIVERSITY OF
MICHIGAN



FERRIS STATE
UNIVERSITY



UNIVERSITY OF
DETROIT
MERCY



LOS ANGELES
PUBLIC LIBRARY



MIDWEST
COLLABORATIVE
for LIBRARY
SERVICES

BIG
ACADEMIC ALLIANCE



WESTERN MICHIGAN
UNIVERSITY
University Libraries



LIBRARY SYSTEM



Advancing learning
Transforming scholarship
Association of College & Research Libraries

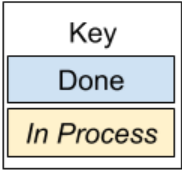
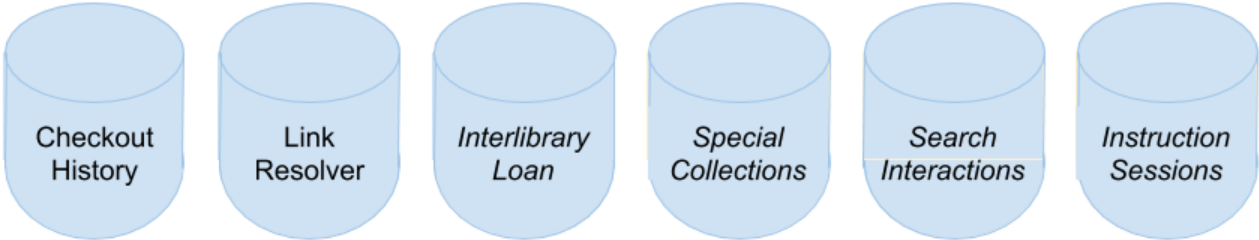
DATA SOURCES & PIPELINES

LIBRARY

Server Logs



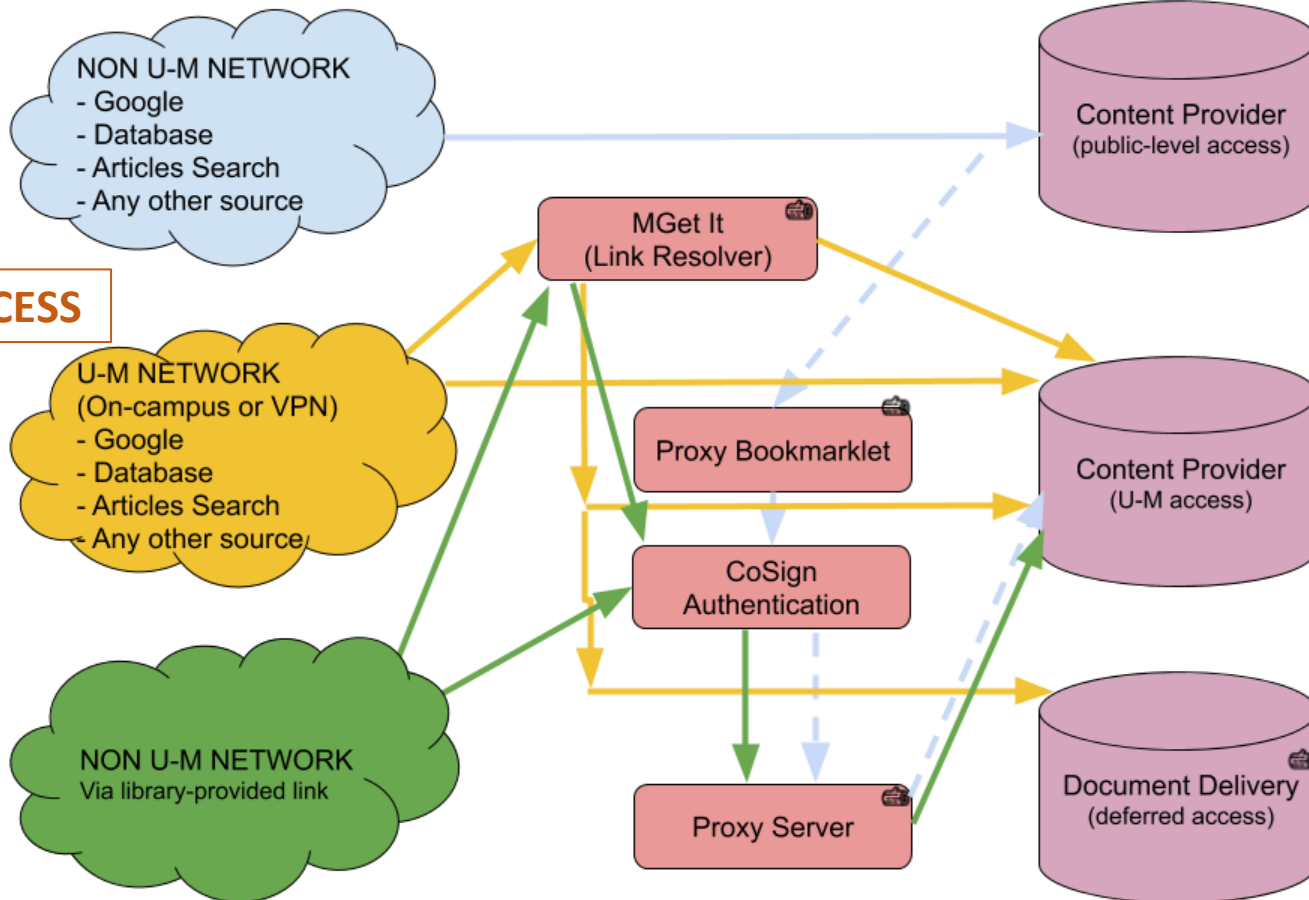
Custom Logs

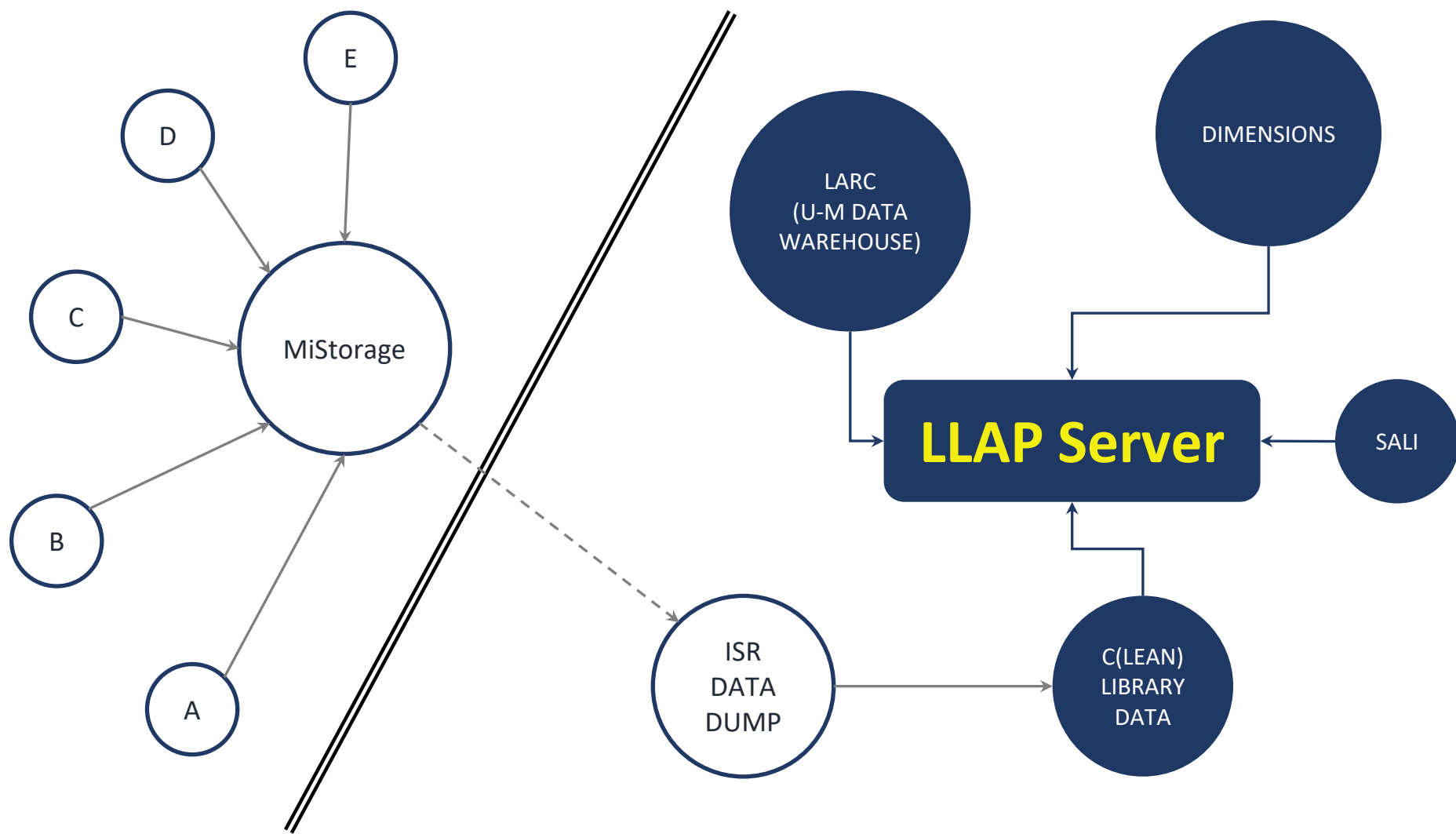


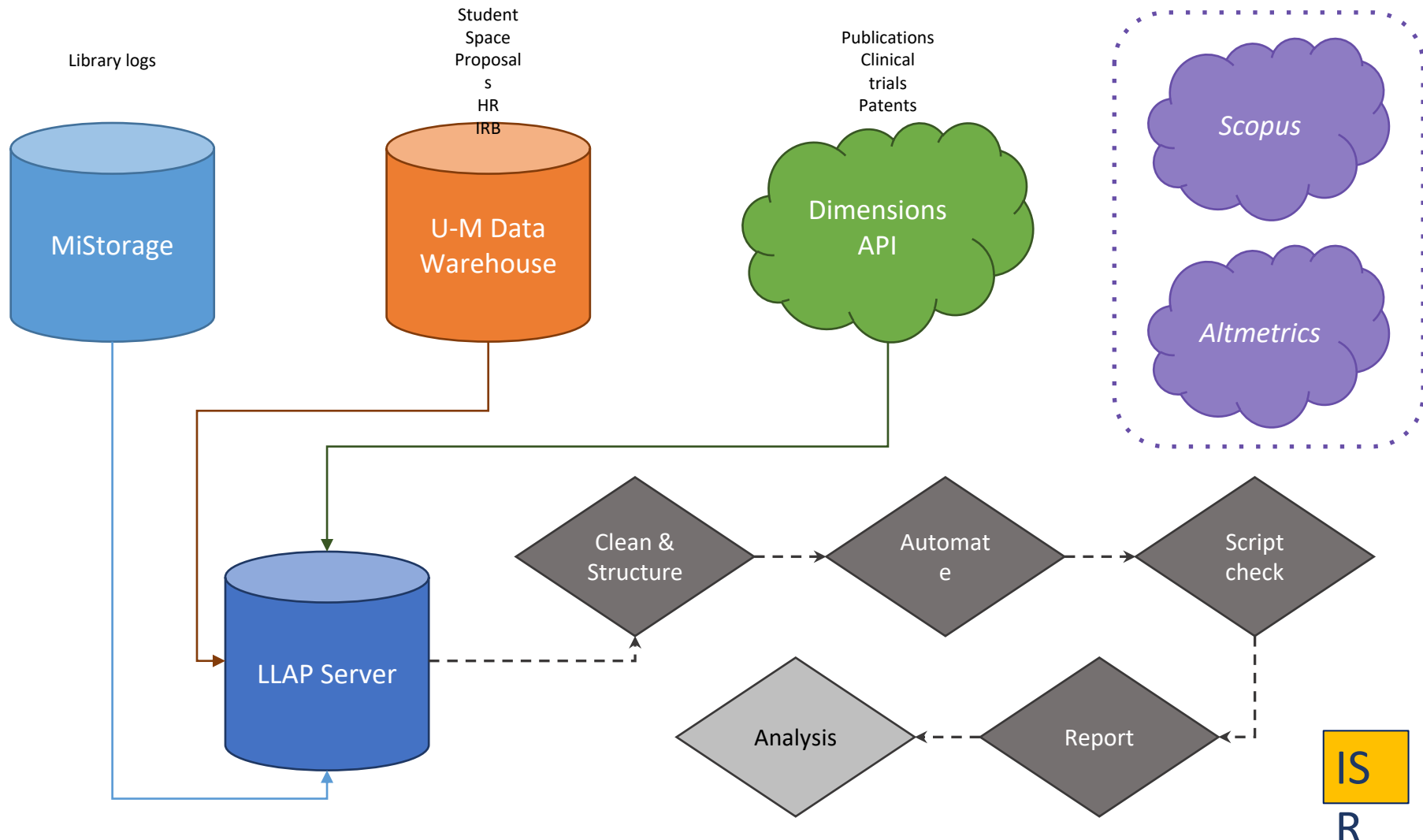
Starting Points

Mediation Points

Access Points







FROM LIBRARY USAGE TO STUDENT OUTCOMES

[https://libraryanalytics.org/presentations-
publications/](https://libraryanalytics.org/presentations-publications/)

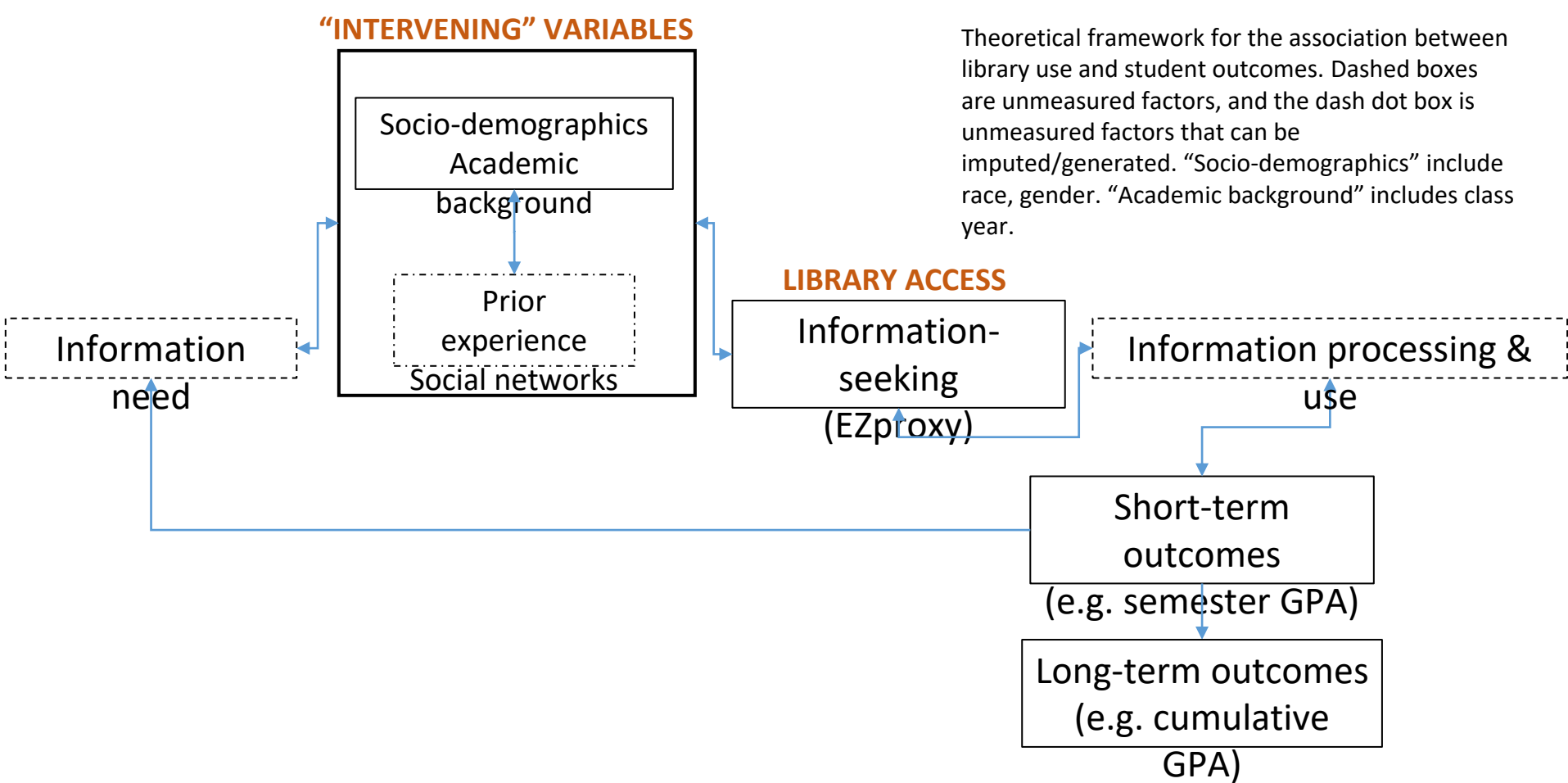


Figure 1. Theoretical framework for associations between EZproxy use and student outcomes adapted from Wilson (1999) and Johnson (1997) models of information behavior.

TOOL/SCRIPT SHARING

Accessing LLAP Resources

- LLAP GitHub repository: <https://github.com/Learning-Library-Analytics-Project>
 - Data Processing
 - Data Analysis
- LLAP project website:
 - <https://libraryanalytics.org/resources/>
- The LLAP team:
 - <https://libraryanalytics.org/project-team/>



01

LLAP Partnership in Action

Laurie Alexander, Felix Kabo, Sebastien Korner,
Doreen Bradley, Jennifer Dean, Sarah Murphy, Sol
Bermann, Stephanie Teasley



02

Reflections, Trends and Possibilities for Learning Analytics and Libraries

Megan Oakleaf, Becky Croxton, Jen-chien (Jen) Yu

Reflections, Trends and Possibilities for Learning Analytics and Libraries

1. What are the trends you are seeing?
2. With the maturation of the field, what has changed, what is interdependent, and what is most challenging?
3. How are we incorporating student perspectives into strategies and program developments? What more can we do?
4. Do you have advice for libraries who do not have resources / infrastructure for this work?
5. Q&A

Reflections, Trends and Possibilities for Learning Analytics and Libraries

Suggested Resources:

- LIILA
<https://library.educause.edu/resources/2018/11/library-integration-in-institutional-learning-analytics>
- CLLASS <https://library.educause.edu/resources/2020/12/connecting-libraries-and-learning-analytics-for-student-success>
- ACRL VAL LA Toolkit
<https://acrl.libguides.com/val/latoolkit>
- CARLI Counts
<https://www.carli.illinois.edu/products-services/prof-devel/carli-counts>



03

Consortial Highlights

Sebastien Korner (moderator), Etienne Pelaprat,
James Russell, Marcia Ham, Amanda Folk,
Ken Varnum



04

PAG Reflections

Moderator: Doreen Bradley

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01

LLA Data Sources & Target Outcomes

Felix Kabo, Doreen Bradley, Stephanie Teasley

Data Sources for Learning Analytics

Stephanie D. Teasley
Research Professor
School of Information
University of Michigan

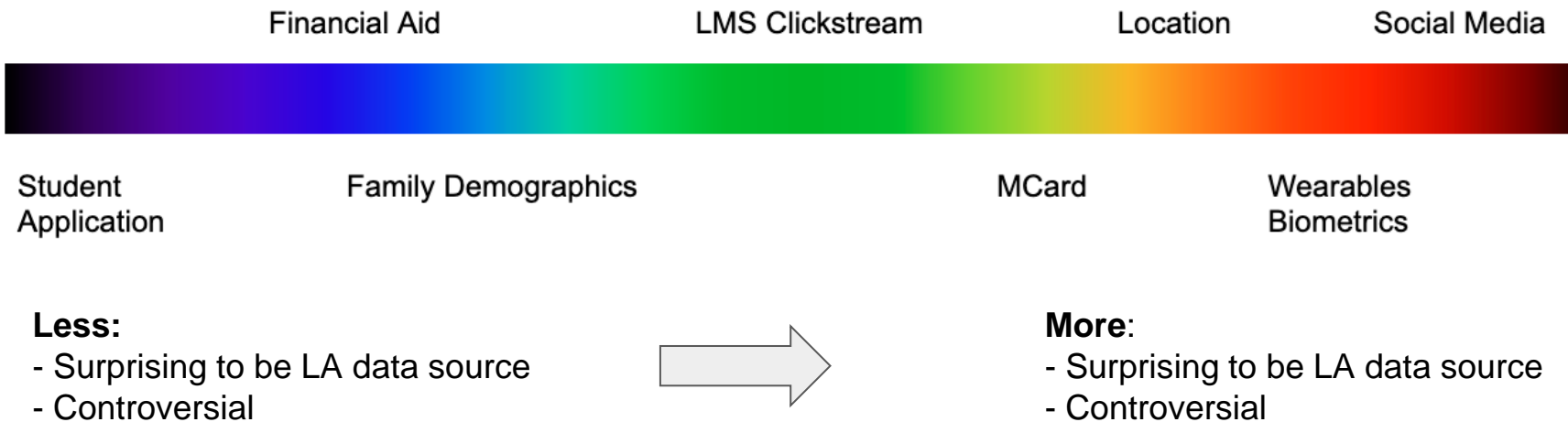
What is Learning Analytics (LA)?

- “the measurement, collection, analysis, and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs.”
- the use of **institutional-level systems** that collect **individual-level student learning data, centralize it** in a warehouse or “record store,” and serve as a **unified source for research** seeking to understand student success.
- a way to help educators **discover, diagnose, and predict** challenges to learning and learner success, and points the way to **designing interventions** that benefit all students—especially those less familiar with the unwritten rules for success in higher education, including first-generation students, community college students, students of diverse backgrounds, students with disabilities, and veterans.

Current UM Datasets & Sources for Learning Analytics

- Student Records
- Recruiting & Admissions
- Financial Aid / Student Financials
- College Resources Analysis System (CRAS): Collapsed Instructor & Course data
- Human Resources & Payroll
- LMS: CTools / Canvas
- Kaltura video content • Lecture Capture

Current Sources of Learning Analytics Data



Where would you put Library data on this continuum?

Examples of LA Methods

Sequence Mining

- RQ: How do course selections influence GPA?

Prediction Models

- RQ: Among freshman entering with strong high school record ($\text{GPA} > 3.8$) , which will do poorly ($\text{GPA} < 2.0$) at the end of their first year?

Clustering

- RQ: Given three categories – under achieving, over achieving, as expected – what categorizes the students who are under achieving?

Text Mining

- RQ: Can we classify students based on messages they contribute to a discussion forum?

Learning Analytics Makes Data Actionable

Focus on behavior change and interventions, for example:

- prediction models lead academic advisors or instructors to talk to students sooner
- dashboards support awareness and decision making
- personalizes instruction by identifying specific learning trajectories

What questions would make library data actionable? What would you do that you can't do right now?

TARGET OUTCOMES

- From library usage to student outcomes, pre/post, earlier “risk” assessment & intervention
 - Performance
 - Retention
 - Persistence in STEM, etc.
- Impact of library instruction
- Disparities in student population
 - Digital access to library resources
- Adaptive/personalized student engagement
- Learning behavioral modification/change
 - Improved decision making e.g., MyLA





02

Walkthrough of LLA Tools & Resources

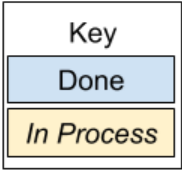
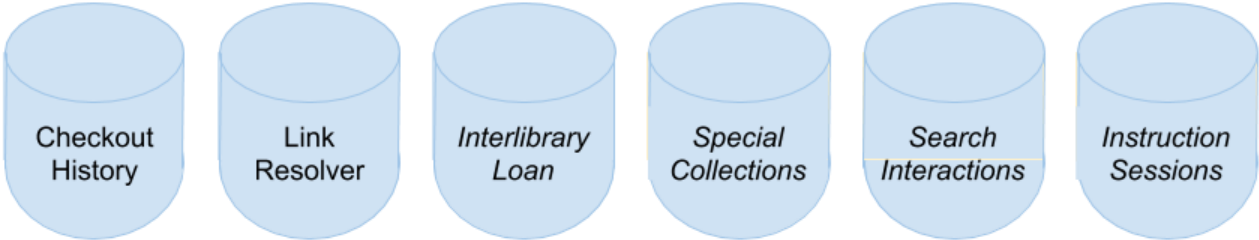
Felix Kabo, Ken Varnum

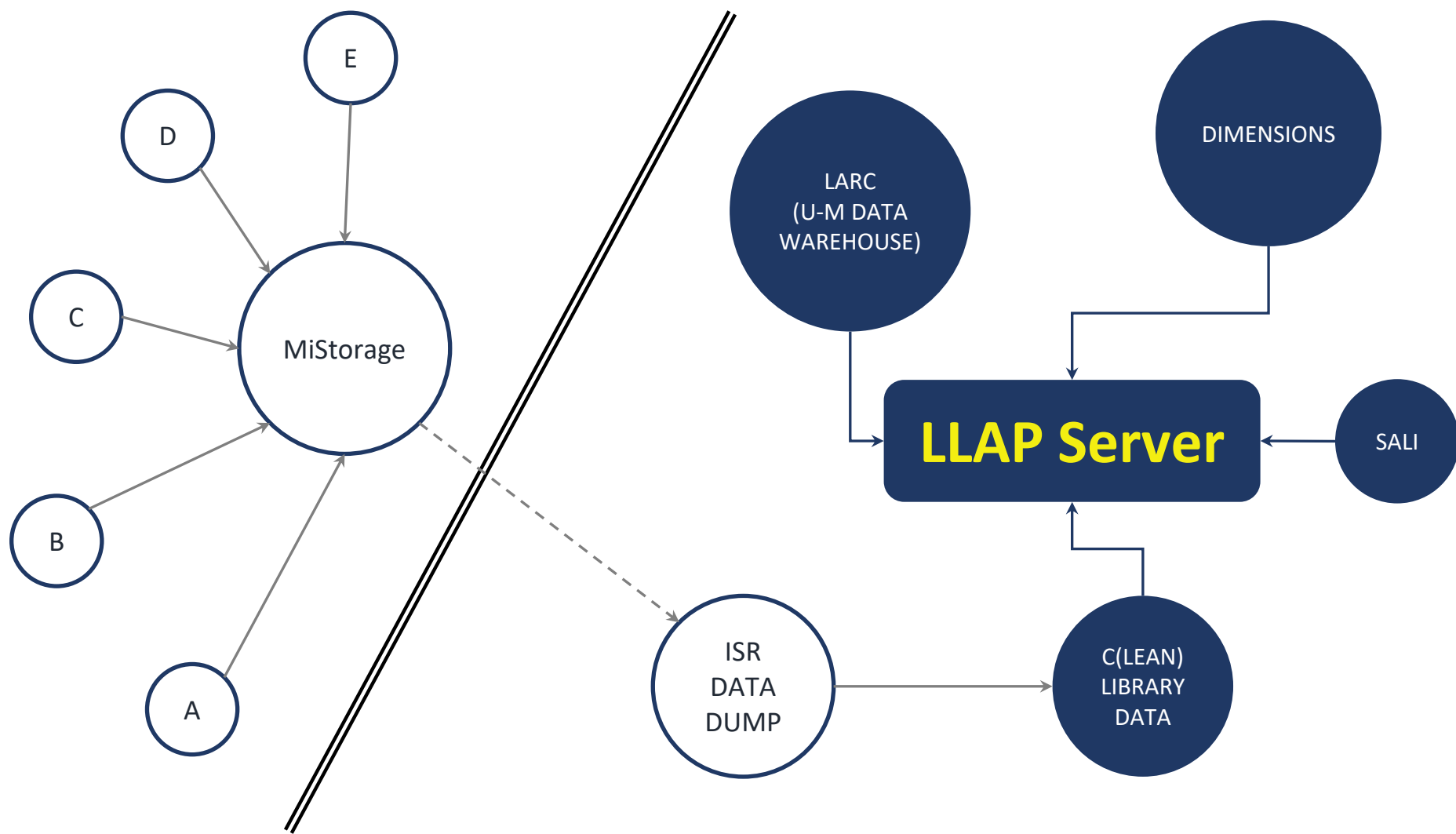
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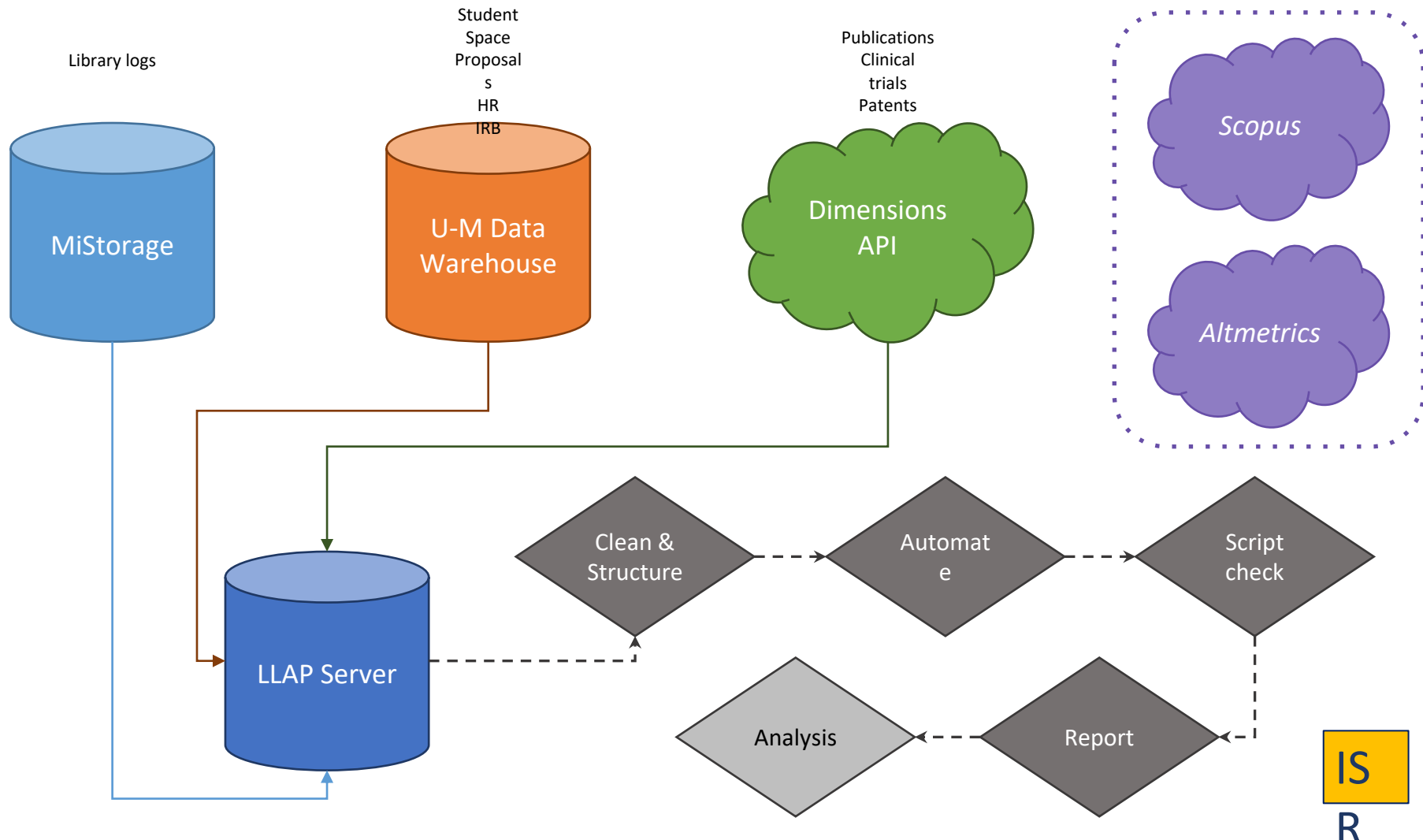
Server Logs



Custom Logs







Teaching & Learning Data Sets

Teaching & Learning data sets are:

[Teaching Analytics Data Architecture \(LARC\)](#)

[Data Explorer](#)

[LARC Data/Unizin Data Warehouse \(UDW\)](#)

Teaching Analytics Data Architecture (LARC)

ts

LARC data describing biographic and demographic information, information about the student's progress and interests in each enrollment term in which they were registered, and academic information about the classes they took while enrolled. LARC is designed for research use and aggregates information from various content areas. LARC data is available as a traditional data warehouse database, and also is available for download as a set of flat

ility

See the [Refresh Schedule](#) for specific refresh times.

ces

[Data Dictionary](#)

[Dataset Discussion Forum](#) (for approved LARC users only)

[Mock Dataset](#) (simulated dataset containing fictional data)

U-M Teaching & Learning Data Sets: LARC

<https://its.umich.edu/enterprise/administrative-systems/data-warehouse/data-areas/teaching-learning>

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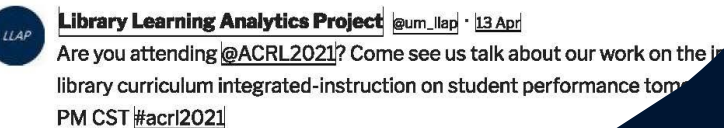
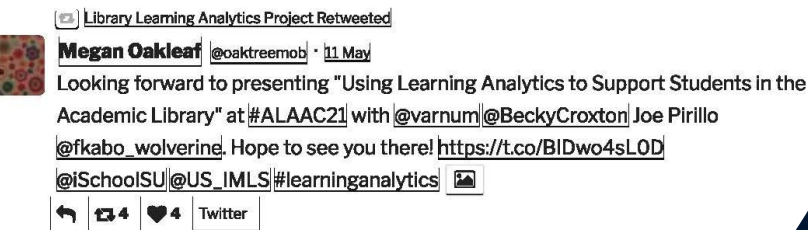
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LLAP Database

Data from LARC/ U-M
Data Warehouse, U-M
Library, and Dimensions

Library Learning Analytics Project

The Library Learning Analytics Project (LLAP) is a collaborative study of how academic libraries impact learning by 17 institutions led by the University of Michigan. LLAP has two primary goals. The first includes identifying how the library impacts learning, especially in the areas of course instruction, research (including funding), and publication. The second entails developing reusable tools, scripts and protocols on the basis of principled engagement and professional agency. The LLAP project will provide guidance on how to best design and implement an empirical, holistic analysis of the links between library usage and learning outcomes. The project will produce a set of tools, scripts, and protocols that will be freely available to all libraries.



LLAP Project Website

<https://libraryanalytics.org/>

Repositories 4 Packages People Projects

Find a repository...

Type Language Sort

Repositories

P-Workshop-2020-Technical-Track

0-1.0 0 0 0 0 Updated on Mar 4, 2020

a-Analysis

0 0 0 Updated on Feb 28, 2020

a-Processing

hon 0 0 0 Updated on Feb 28, 2020

P-Workshop-2019

processing and more with R

0 3 0 0 Updated on Feb 20, 2020

p languages

Python R

LLAP Project GitHub Site

<https://github.com/Learning-Library-Analytics-Project>



03

Statistical Analysis & Modeling

James Henderson



THANK YOU!

Twitter: @um_llap

Website: <https://libraryanalytics.org/>