

Library Analytics Case Study: Informing and transforming library instruction

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Today's Topics

Campus Engagement & Alignment

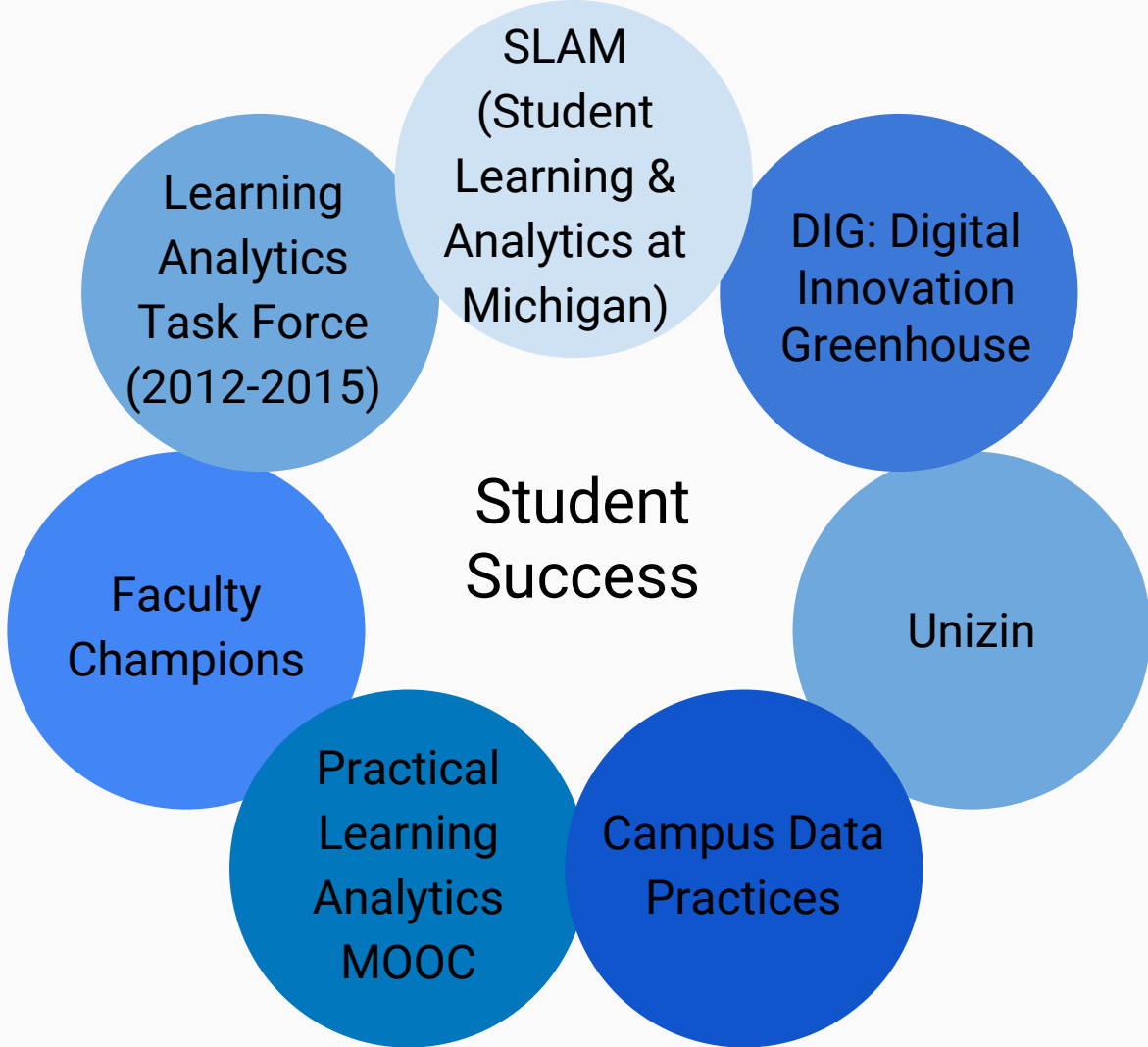
Programmatic Challenges

Experimentation & Learning

Lessons Learned & Next Steps

Thoughts & Questions

Campus Engagement & Alignment



Programmatic Challenges

Complexities (access, storage, analysis)

Policy implications (privacy, IRB)

Emergent nature of analytics

Data (incomplete, interoperability, sources, vendors, authentication & wireless)

Expertise

Experimentation & Learning

Curriculum Integrated Instruction for Undergraduates

- Who do we teach for? In what part of the curriculum?
- How might we make more informed decisions about resource allocation and engagement within the curriculum?

Experiment Elements

- Identified questions and data points to answer questions
- Obtained data from SALI and LARC, clean data
- Statistical analysis using STATA
- Exploration of results with stakeholders to understand implications and future needs

Team



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Doctor of Philosophy in Higher
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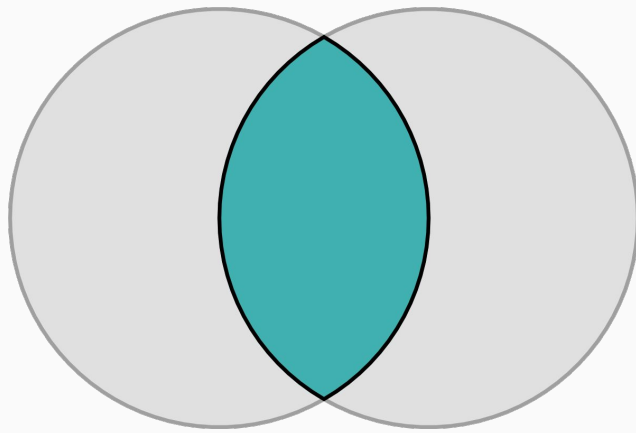
Theresa Stanko

Administrative Project Coordinator

Data Sources

SALI - Scheduling App for Library Instruction

Data on all
curriculum related
library sessions
taught July
2013-Apr 2017



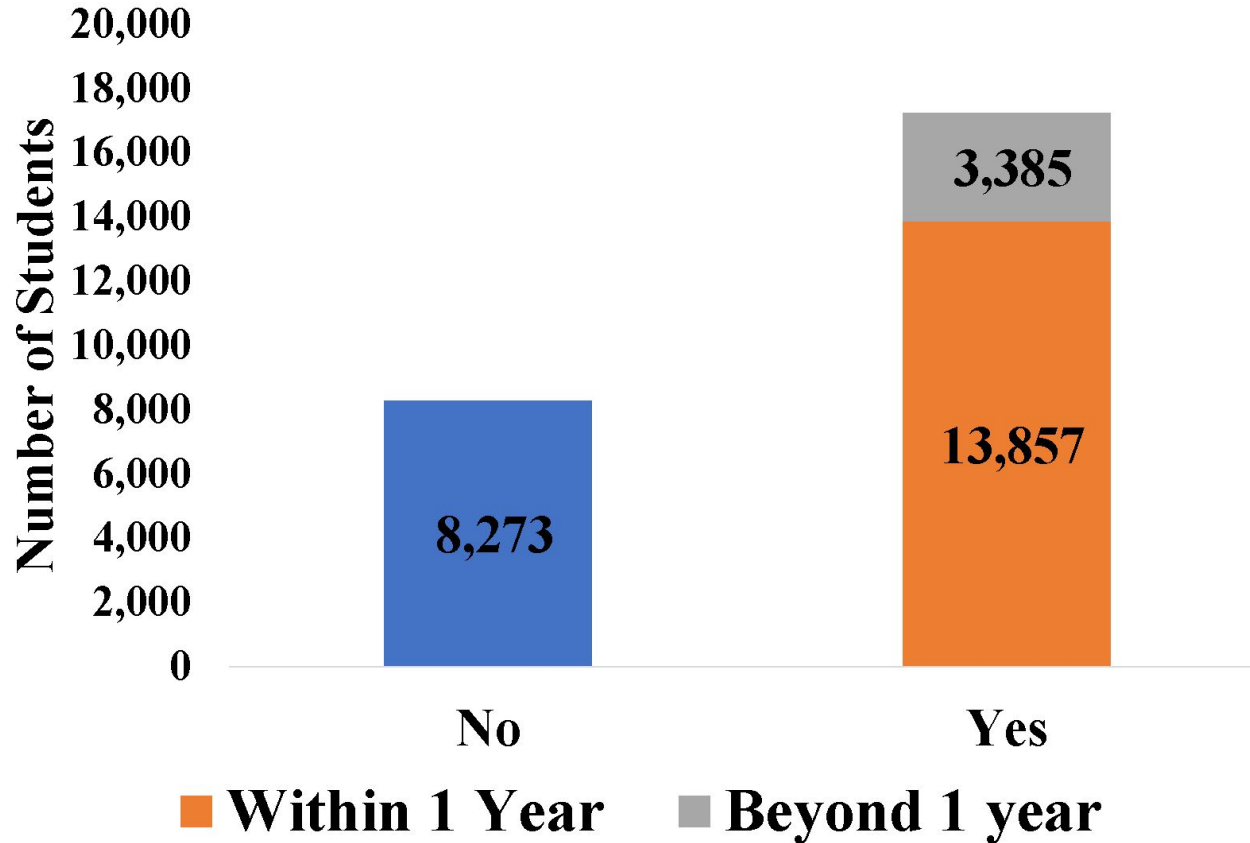
U-M Data Warehouse

Learning Analytics
Data Architecture
(LARC)

- Data at admission
- Data for current semester
- Data during time at U-M
- De-identified data

UM Data Warehouse: Student Criteria	Students Removed	N
Starting Number of Students	--	199,212
Drop students who earned above a bachelor's degree	44,463	154,749
Drop students without a first term attended variable	21,079	133,670
Drop students who never had the opportunity to enroll in library courses (e.g., student's last year was less than or equal to 2012)	63,435	70,235
Drop students whose first term was before summer 2013	26,532	43,703
Keep students whose first enrollment was "Freshman"	18,177	25,526
Drop students whose library course term was less than first term	11	25,515

Number of Students in Courses with Library Instruction



Cohorts by Entering Year	7/2013 - 4/2017	
Fall 2013/ Winter 2014 Cohort	4136	71.2%
Fall 2014/ Winter 2015 Cohort	4389	71.4%
Fall 2015/ Winter 2016 Cohort	3946	68.7%
Fall 2016/ Winter 2017 Cohort	3479	55.0%
Sp/Su 2013-2016	1292	87.4%
Total	17242	67.6%

Top 10 Courses for Instruction

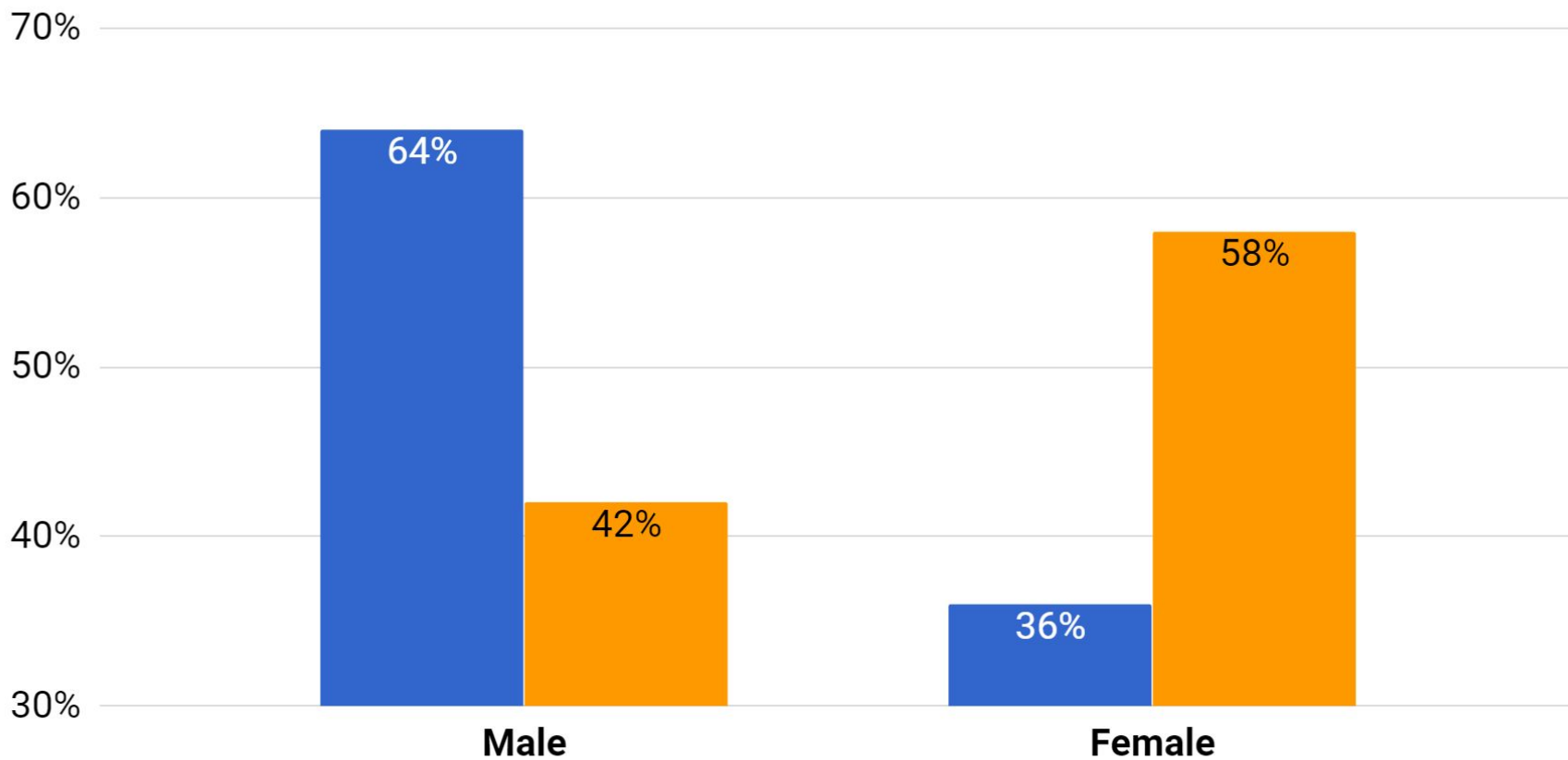
FY 16

FY17

1.	English125	1,270	UC 280	1,190
2.	UC 280	1,060	English 125	1,001
3.	Engr 100	467	WmnSt 220/Nurs 220	732
4.	Psyc 303	398	WmsSt 240/AmCul 240	541
5.	Comm 121	343	Engr 100	533
6.	WmnSt 220/Nurs 220	340	Psyc 303	358
7.	English 124	294	English 124	344
8.	WmsSt 240/AmCul 240	292	MechEng 450	262
9.	MechEng 450	265	Comm 121	249
10.	English 225	242	Sociol 100	247

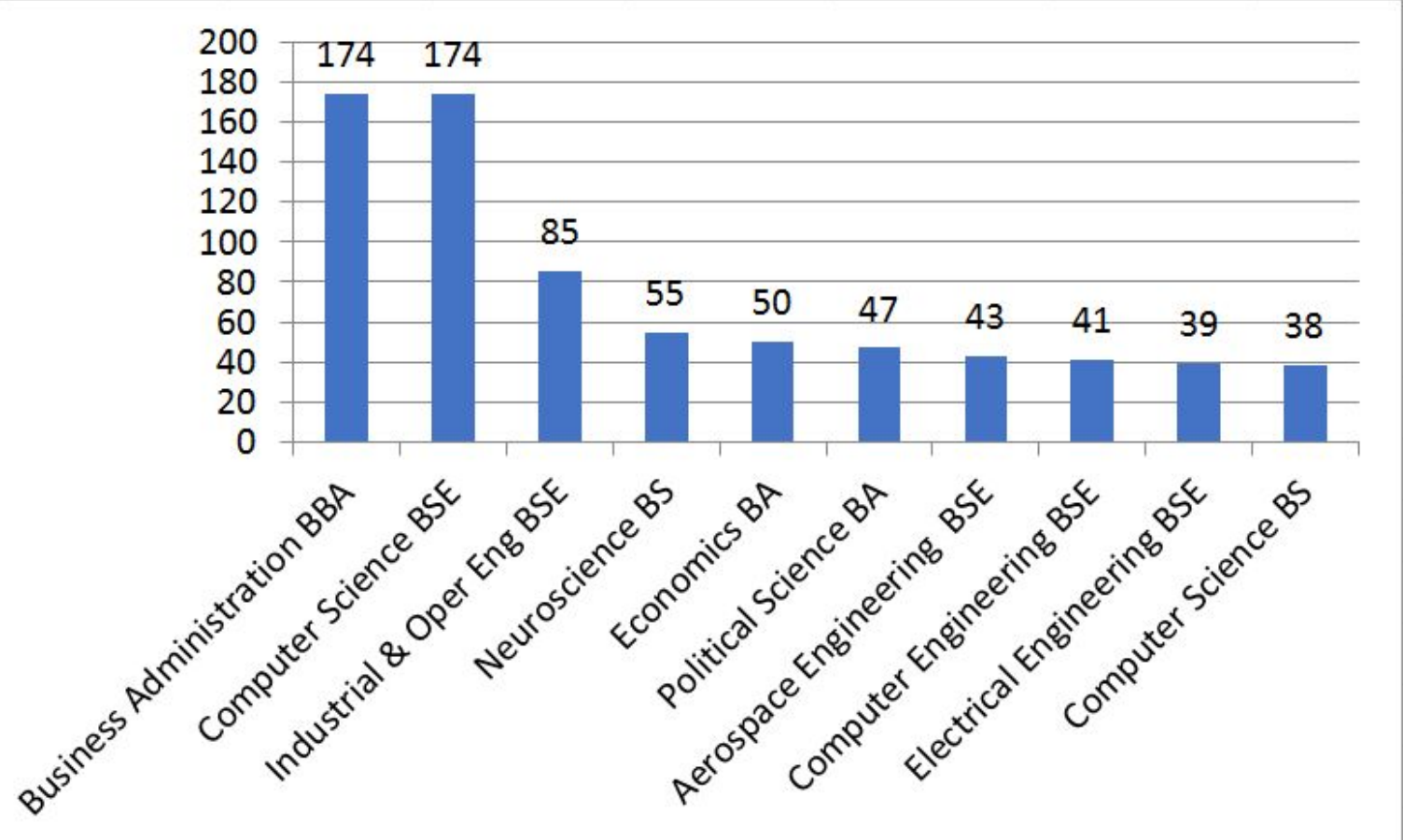
Frequency and Timing		
# of Library Sessions	Of Students <u>who had library instruction</u> , how many sessions total over 4 years?	Of <u>all U-M Students</u> , how many instruction sessions did they have in their 1st year?
1	51.1%	52.8%
2	27.4%	21.1%
3	12.2%	5.1%
4	5.4%	1.2%
5	3.8%	0.2%

Gender

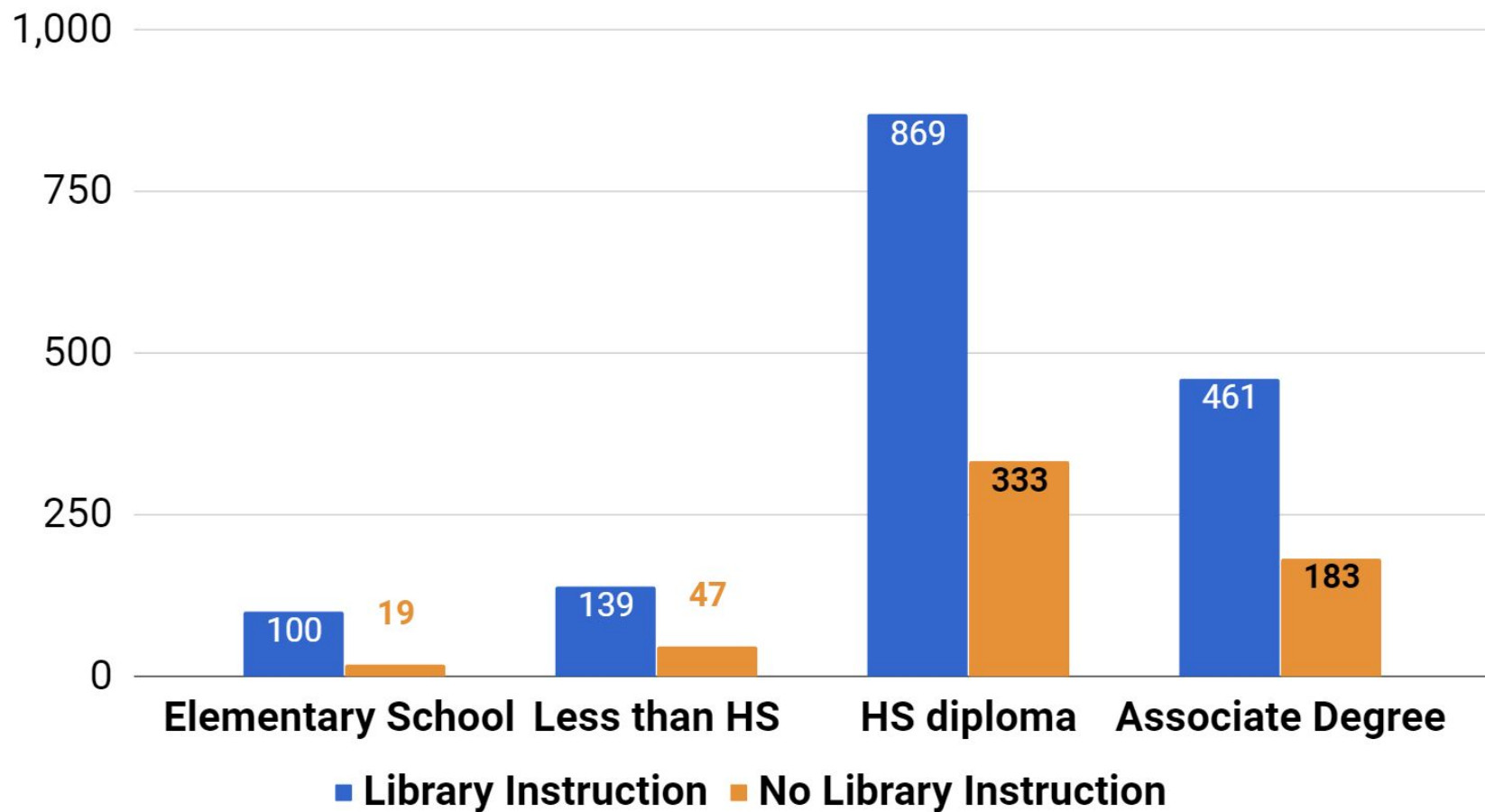


■ **Students Not Receiving Instruction** ■ **Students Receiving Instruction**

Students Receiving No Library Instruction - By Major

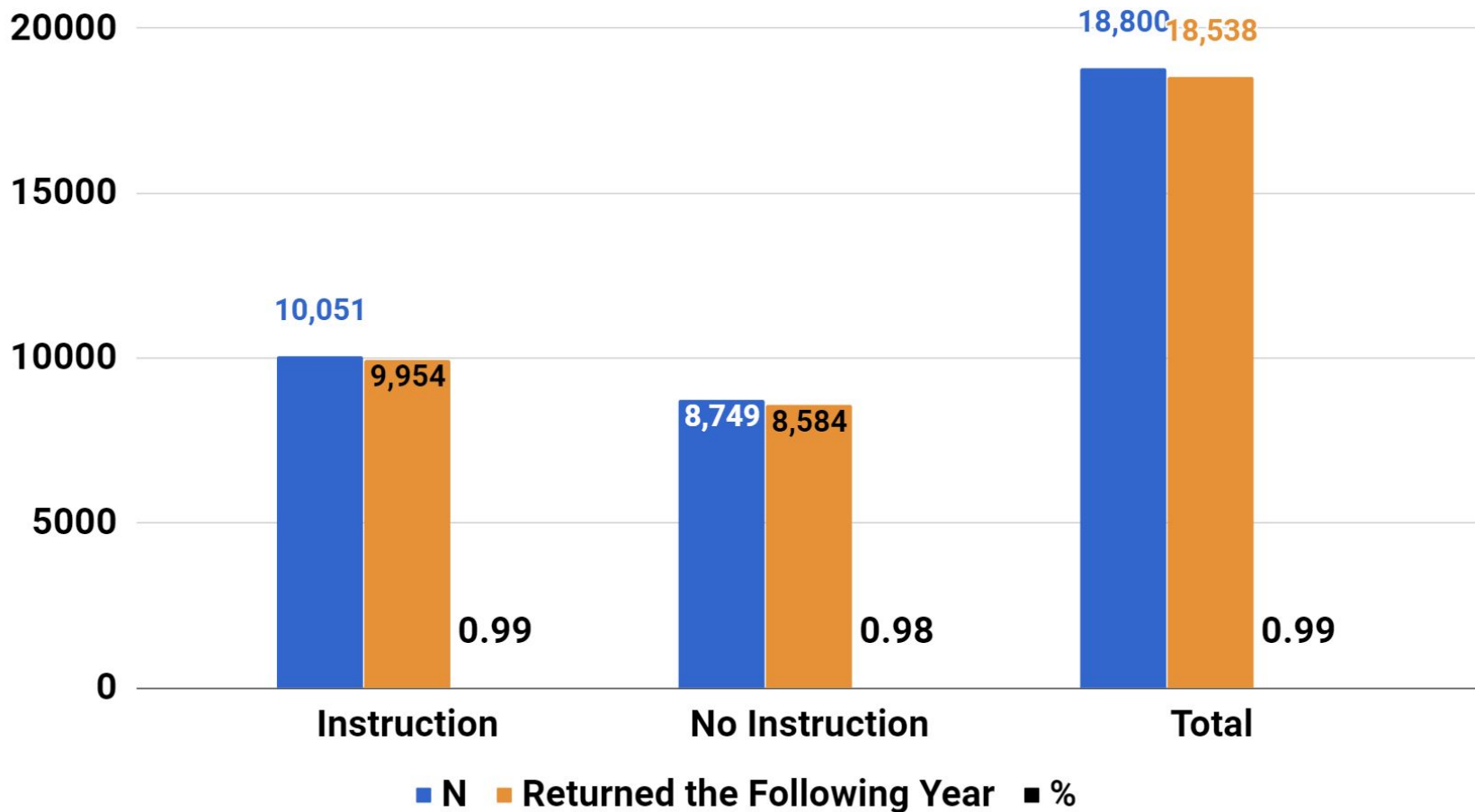


First Generation: Parental Level of Education

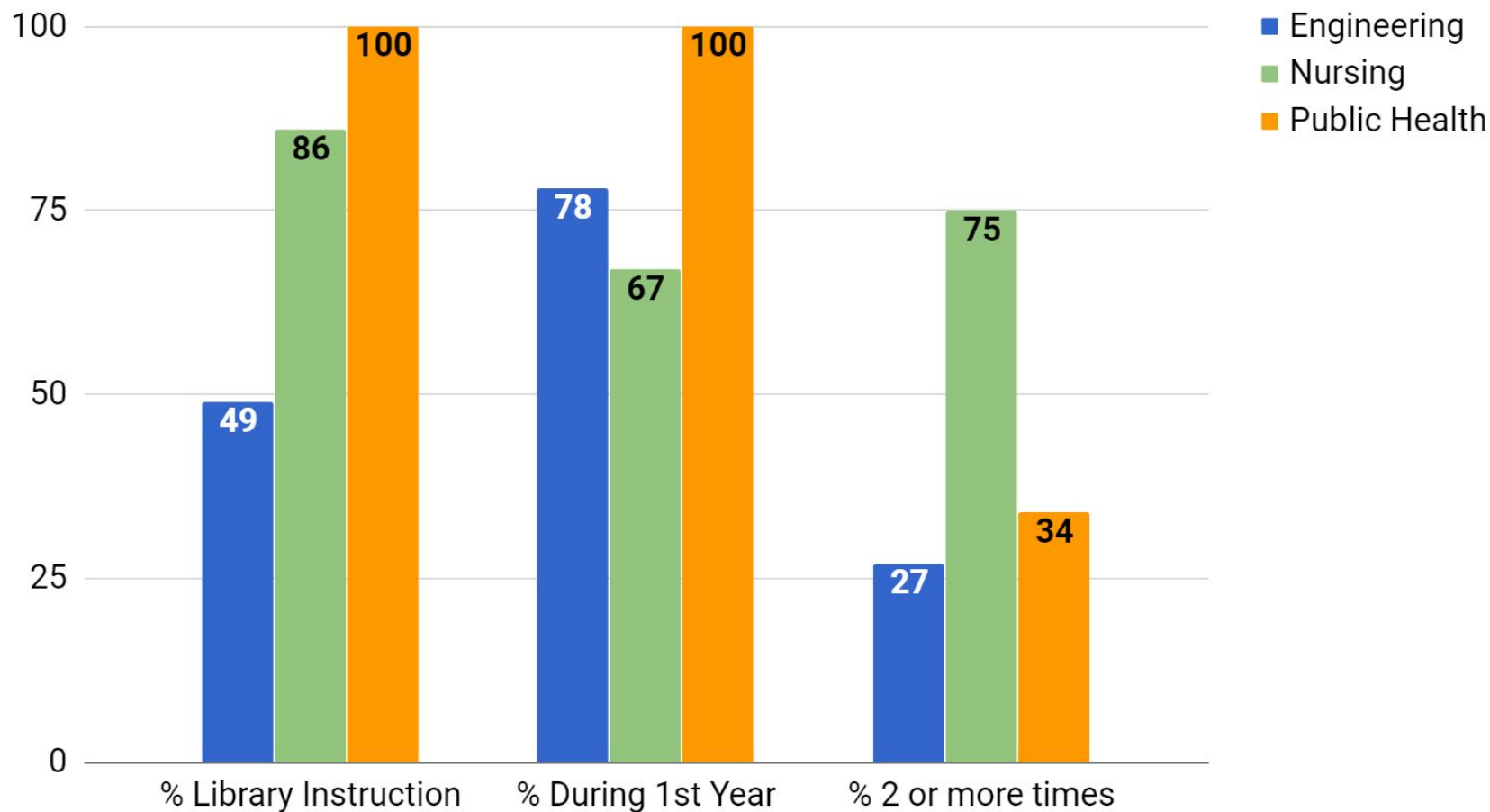


Race	Library Instruction	No Library Instruction	% Taught
White	10,979	5,248	63%
Asian	2,754	1,659	62%
Black	920	191	83%
Hispanic	996	391	72%
Hawaiian	9	2	82%
Native American	24	5	83%

Student Retention



Instruction by Discipline



Special Collections Library Instruction

Fall 2013 entering class receiving instruction by graduation in April 2017

Major	History	58%
	Art History	71%
	English	53%

Lessons Learned & Next Steps

Programmatic Engagement

data to begin conversations with programs

Improved Data Collection

data analysis uncovered gaps in our data collection practices and provided opportunities to improve our processes

Expertise

increased our understanding of what expertise is needed and the expertise gaps we need to shorten (e.g. training, hiring)

Campus Alignment & Engagement

connect our own data, connect with campus data, and contribute our data to approved campus researchers



Thoughts &
Questions