Uncovering More Treasures in the Data

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INTRODUCTION

E-resources are a ubiquitous part of the educational and research activities of institutions of higher education. The need for e-resources became even more apparent when universities and colleges were forced to shut down their campuses with the onset of the COVID-19 pandemic in March 2020. Instructors converted their face to face classes to virtual ones. Researchers conducted their work from off-campus locations with very few exceptions.

Like other university and college libraries across the country, the University of Hawai'i at Mānoa Library responded to the pandemic by providing access to e-resources and online services and to very limited, if any, physical resources and in-person services.

OBJECTIVES

Using local evidence obtained from an EZproxy server, what has been the impact of COVID-19 on patron usage patterns of e-resources: day of the week, time of day, location? Also, how has the volume of e-resource usage changed over the last five years?
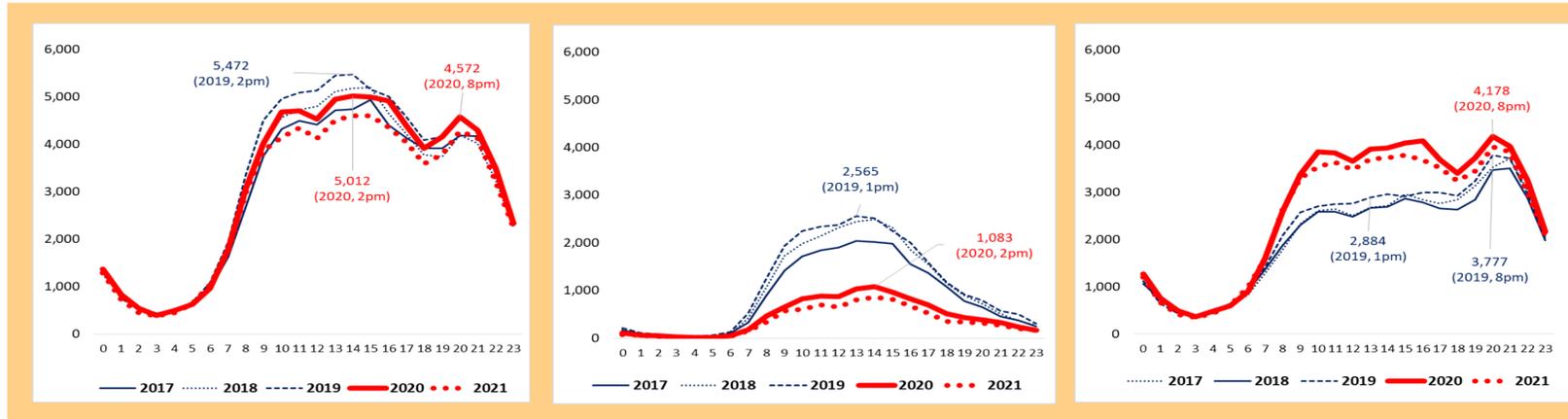
Student Population and Staff Count

	UG	% Change	Grad	% Change	Fac/Staff	% Change
Fall 2017	12,881	-	4,731	-	4,759	-
Fall 2018	12,968	0.68%	4,742	0.23%	4,690	-1.45%
Fall 2019	12,631	-2.60%	4,859	2.47%	4,588	-2.17%
Fall 2020	13,203	4.53%	4,822	-0.76%	4,432	-3.40%
Fall 2021	14,120	6.95%	4,978	3.24%	4,249	-4.13%

Unique User Count by Group

Overall Access by User Group: 2017-2021
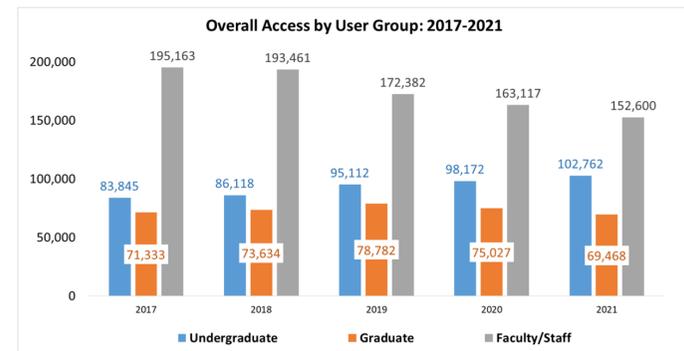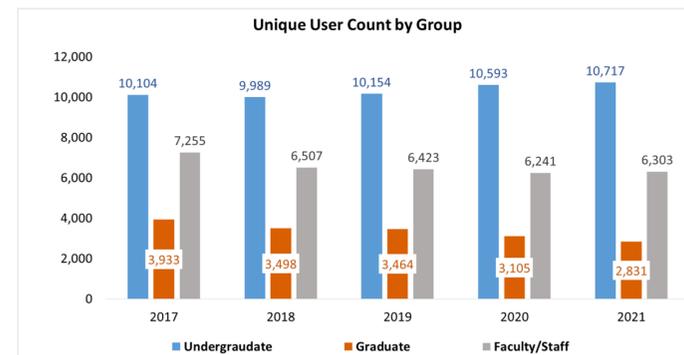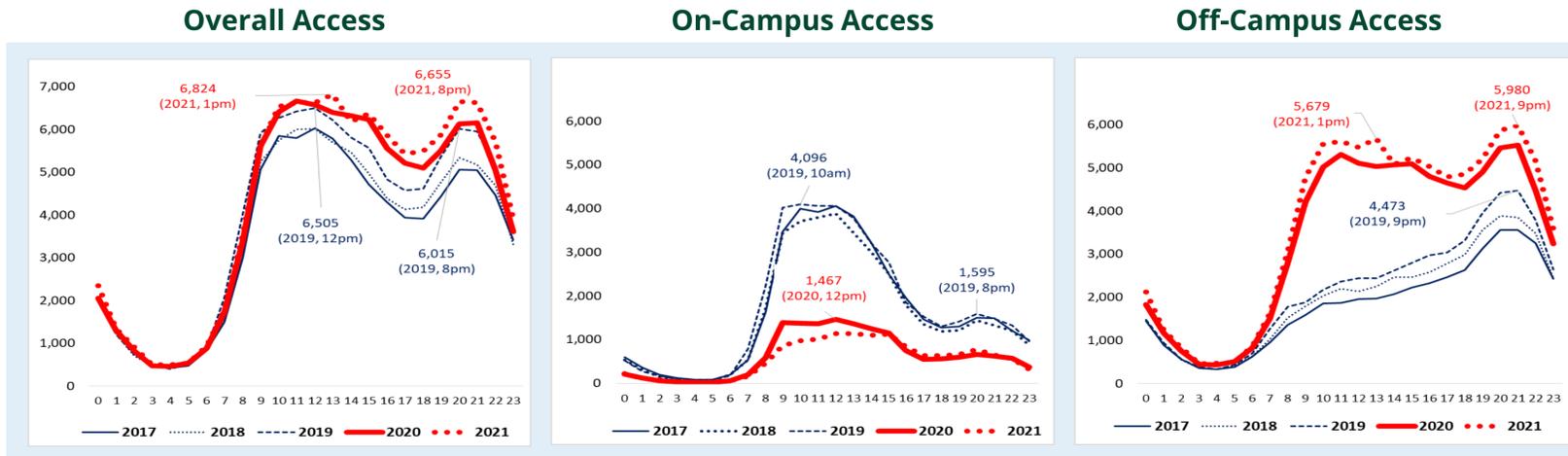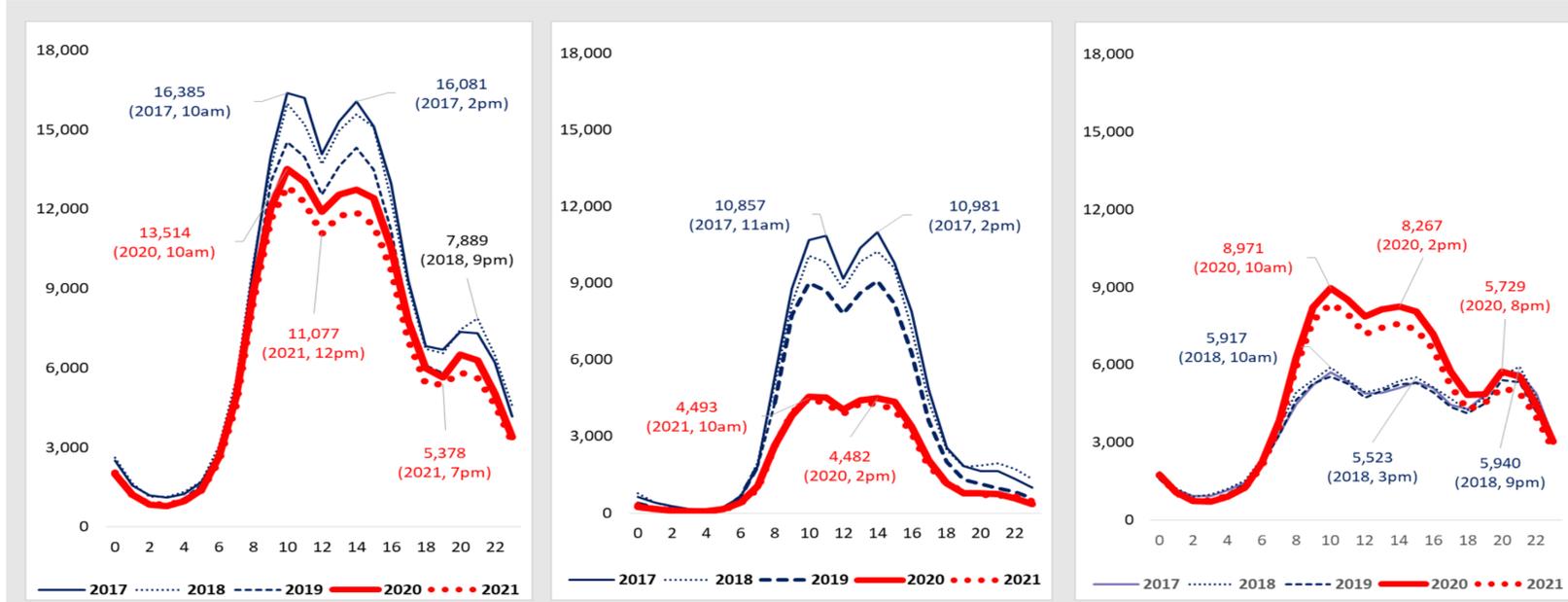
METHODS

The UH Mānoa Library requires almost all of its patrons to be authenticated through its EZproxy server in order to access e-resources even when they are on campus with a few exceptions**. The EZproxy server logs all activities while users interact with resources once they login. This generates a tremendous amount of data. Because of the volume of data, this study limited its analysis to data recorded when users logged into the server.

Over 1.7 million entry points from 2017 to 2021 were analyzed. The following data points were collected,

- IP address of the computer being used
- User Group
- Date and time stamp identifying when the user logged into the ezProxy server
- URL of the e-resource (e.g., database, e-journal, journal article, or e-book) being requested at the time of entry

MS Access and Excel were the tools to count, query, sort, and visualize the data.

** Staff and classroom computers connected directly to the UHM Library's computer network bypass authentication altogether.

CONCLUSIONS

- COVID-19 and the switch to online learning during the pandemic did not drastically change student and faculty/staff usage of library resources.
- A majority of students and faculty/staff use the Library's resources.
- Overall usage during the course of a day was consistent during the five-year period despite COVID-19.
- Undergraduate students' on-campus and off-campus usage was most impacted by COVID-19.
- Usage by faculty/staff dropped during the five years. The drop is most likely a reflection of the 10% decline in the number of faculty/staff employed.
- Limitations: This study does not provide a faculty-only picture since all employees are assigned to the same user group. The results do NOT provide a complete picture of e-resource usage since only entry point log data was analyzed.
- This study could provide a more accurate picture of usage by including vendor provided usage data and post-pandemic data.

REFERENCES

Dennison, C., & Sung, J. (2019). Finding hidden treasures in the data. In S. Baughman, S. Hiller, K. Monroe, & A. Pappalardo (Eds.), *Proceedings of the 2018 Library Assessment Conference: Building Effective, Sustainable, Practical Assessment* (pp. 26-39). Association of Research Libraries; University Libraries, University of Washington.

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Overall Access — On-Campus Access — Off-Campus Access

Undergraduate Students

Graduate Students

Faculty / Staff