

Background

- During COVID, universities implemented policies that resulted in quick push for faculty to convert to online platforms¹
- Faculty were often frustrated they could not better accommodate their students²
- Most research focuses on student performance during COVID time period rather than how faculty adapted³
- Most research does not focus on 2nd or 3rd year courses, even though retention rates are lowest during that period⁴

Research Question:

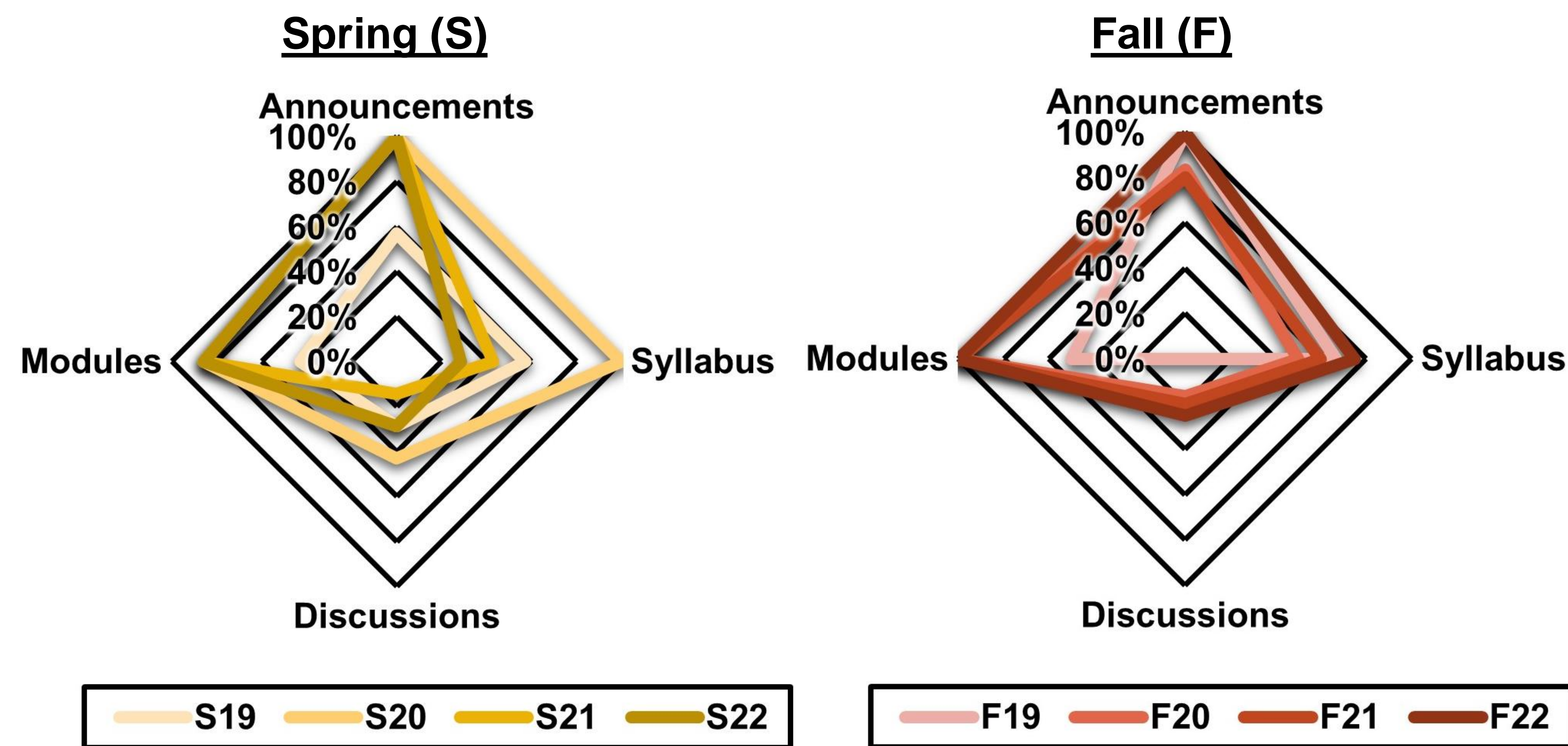
How does engineering instructors' LMS use change before, during and after a sudden disruption to higher education?

Methods

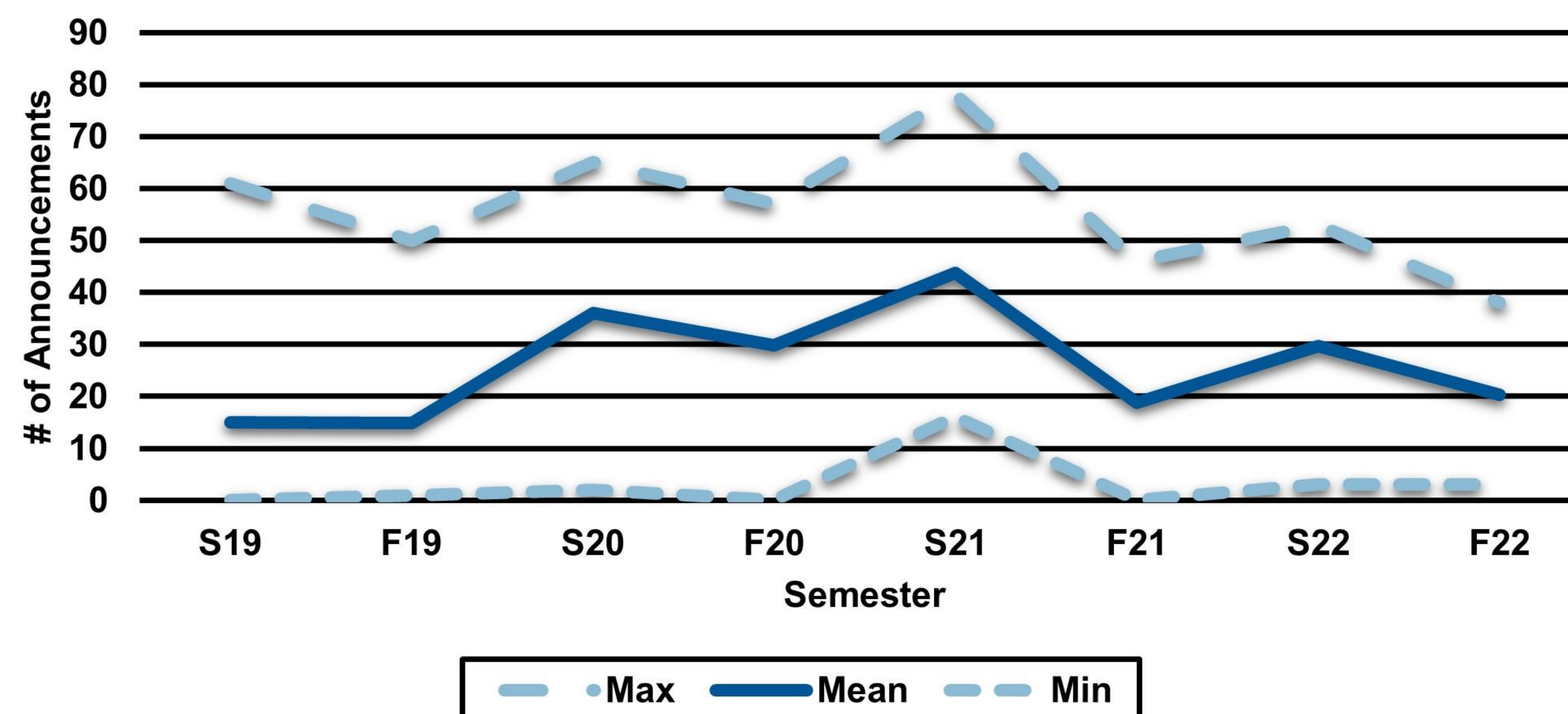
- Setting: Midwestern R1 University
- LMS Data
 - 2nd and 3rd Year Core Civil Engineering Courses
 - Gathered at the end of the semester from Spring 2019 through Fall 2022
 - 4-7 courses per semester
 - 16 different LMS features (4 shown in results)
- Descriptive statistics used to summarize LMS feature use frequency

Results

Instructor Communication using LMS Features



Announcements by Semester



Key Findings

- Spring Semesters – Instructor Communication: LMS feature use was at its peak during the height of the pandemic
- Fall Semesters – Instructor Communication: LMS feature use has been steadily rising since 2019
- All Semesters – Announcements: General increase in announcements until Spring 21, followed by a general decrease

Conclusions

- Spring and Fall courses have different trends because they have different instructors
- Discussion usage may have been low because faculty could have used other 3rd party tools as a substitute
- More research will be needed to see if these trends hold for other departments

References

1. Stojan et al. *Onl. Lrn. Devt. in U.G. Med. Educ.* **2022**, 44(2), 109–129.
2. Ramlo. *Fac. Views. on Univs. mov. Onl. during a Pandemic.* **2021**, 46(3), 241–259.
3. Mospan et al. *Trends in Digital Adpt. of Sch. during Pandemic.* **2022**, 91(5), 21–35
4. Yoon et al. *Ident. of Engr. Gtwy. Subj. in Sec.-Year Engr. Curr.* **2019**, 35(1), 232–251.

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