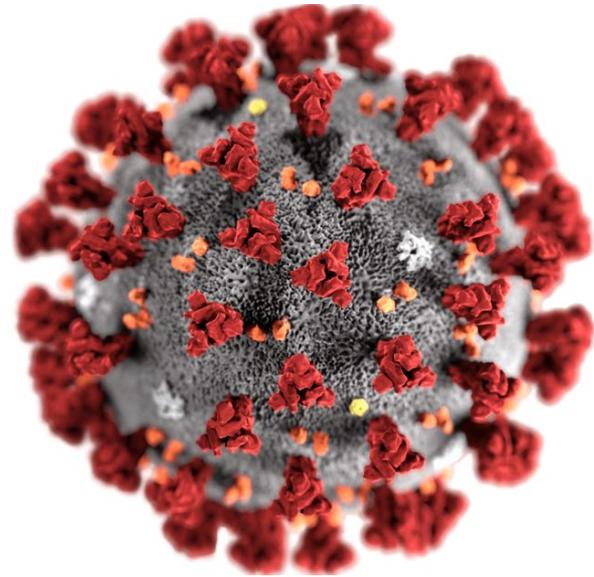


Macroscopic Impact Trends From The Pandemic On Geoscience Programs

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Pandemics and Programs



Image Credit: Mohammad Hanif Jawid, Kabul Polytechnic University
Life as a Geoscientist 2015

**A tale of shock, evolution,
and innovation**



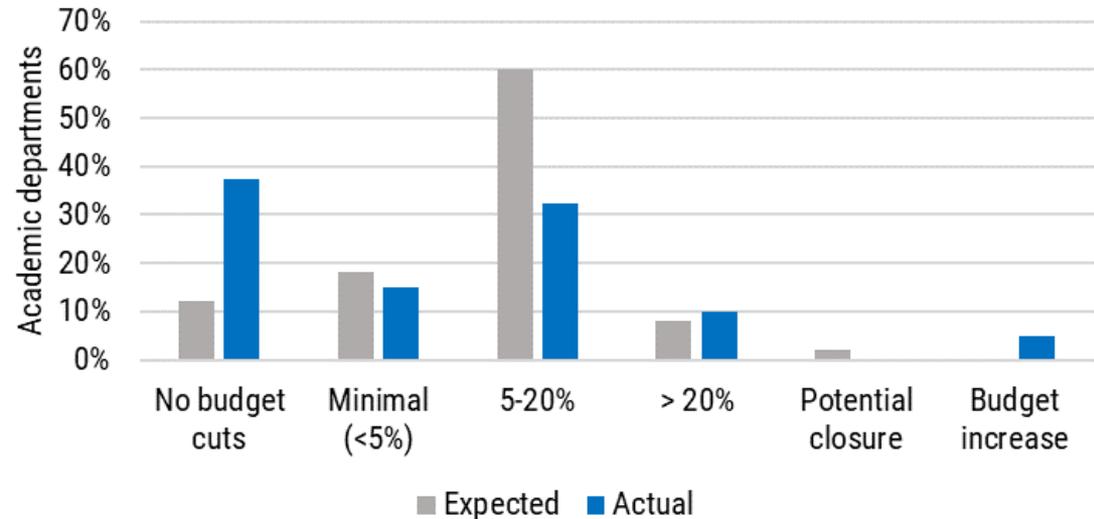
Department Budgets

Budget cuts less severe than expected for most departments.

Just over 1/3 of departments reported no budget cuts.

13% of departments reported cuts worse than expected.

Expected vs. actual budget changes for 2020-2021 academic year



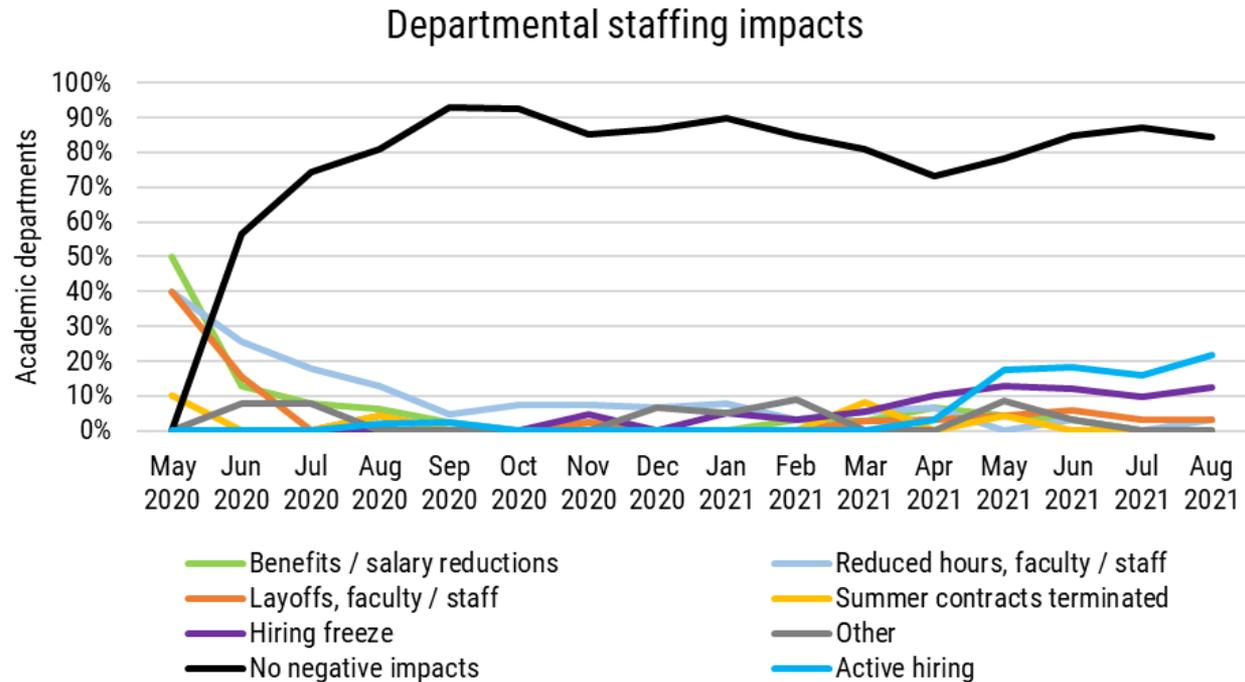
Staffing Impacts on Departments

Staffing impacts primarily occurred in Summer 2020.

Most impacts centered on reduced hours and furloughs of staff and non-tenured faculty.

Current impacts are mostly centered on hiring freezes and leaving positions unfilled.

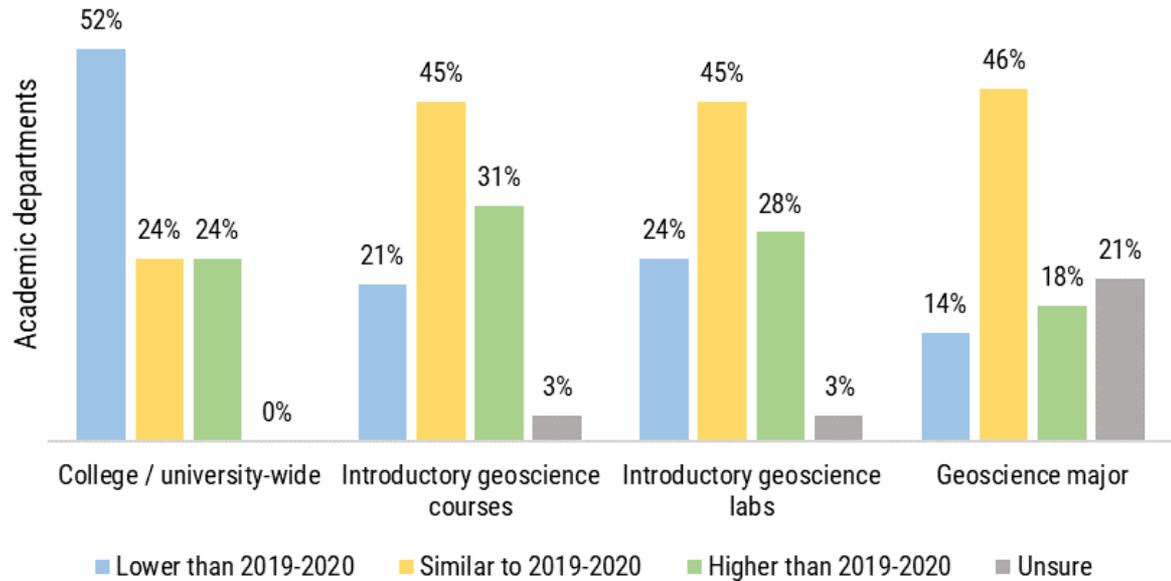
Active hiring picked up in May 2021. Departments primarily hiring to fill positions created by layoffs as well as for new positions.



Enrollments

Enrollments generally down at institutions for 2020-2021 AY, but similar to or higher than 2019-2020 AY for geoscience courses.

Enrollments 2020-2021 relative to 2019-2020

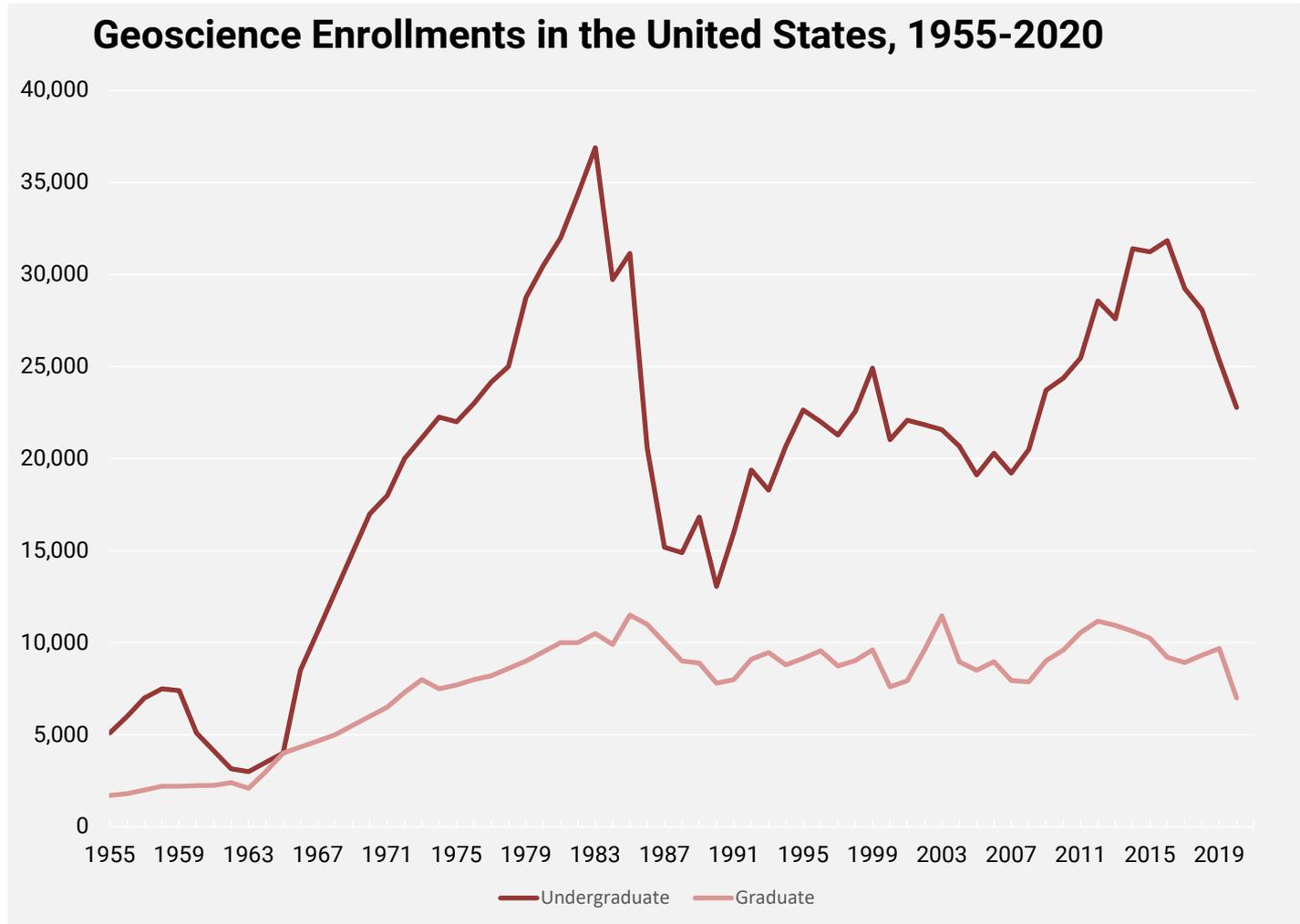


Decrease in on-campus majors

Primary areas impacted in enrollments overall:

- Petroleum-oriented
- Smaller Liberal Arts Colleges
- Smaller regional universities

Graduate enrollment is breaking long-term trend

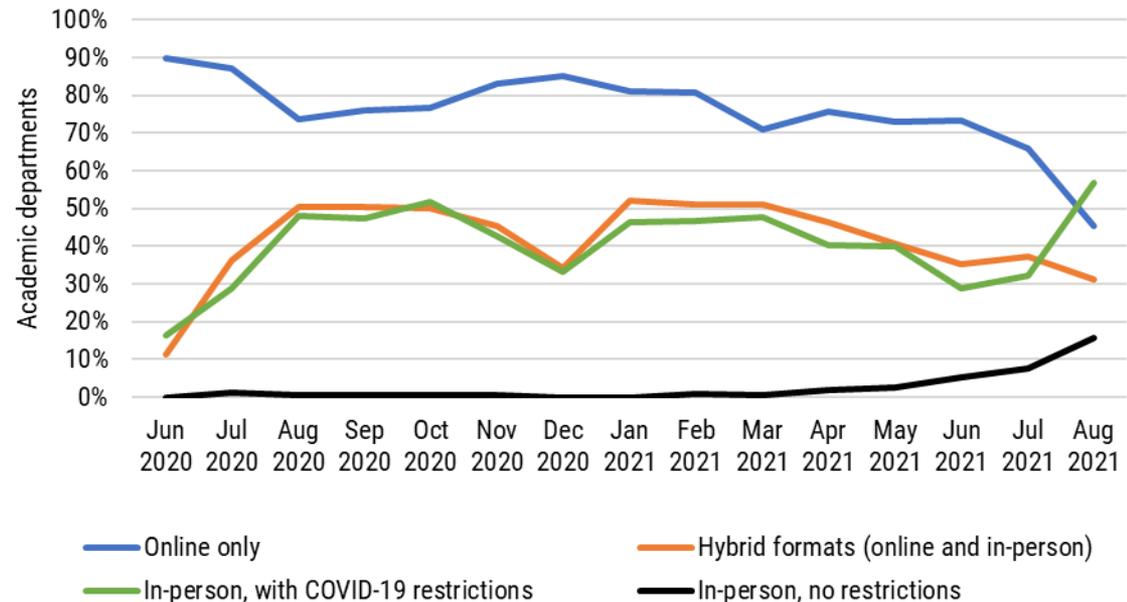


Instructional Formats

Most departments now offering only in-person instruction (primarily with COVID-related restrictions like masking).

Just over 1/3 departments reporting dual-mode delivery with a combination of in-person / online or in-person / hybrid modes.

Course instructional formats

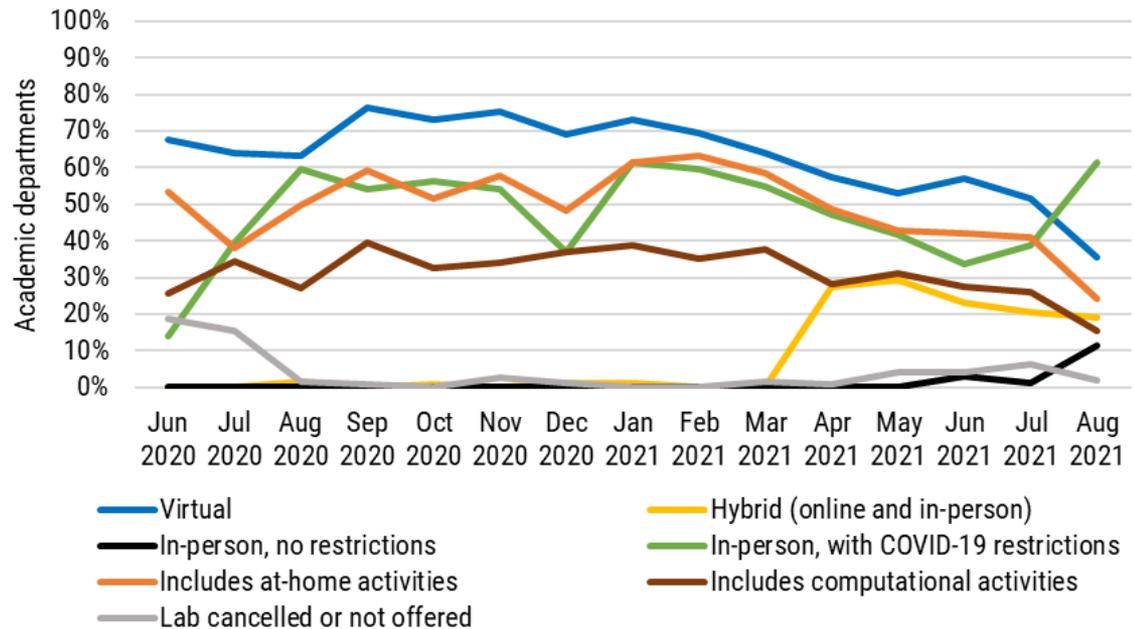


Instructional Formats

Most departments have returned to in-person instruction for labs.

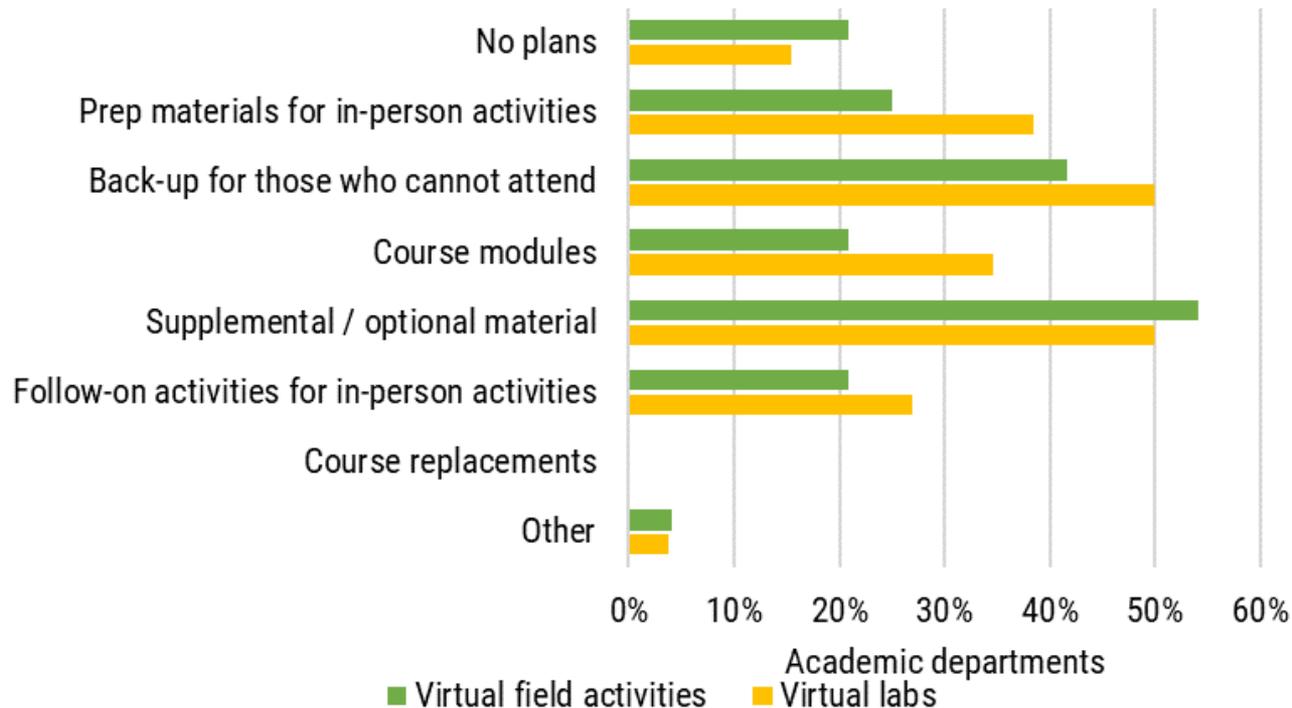
Most departments offering single-mode instruction, with ~ 1/4 offering multiple modes of instruction for labs.

Formats of lab sections / courses



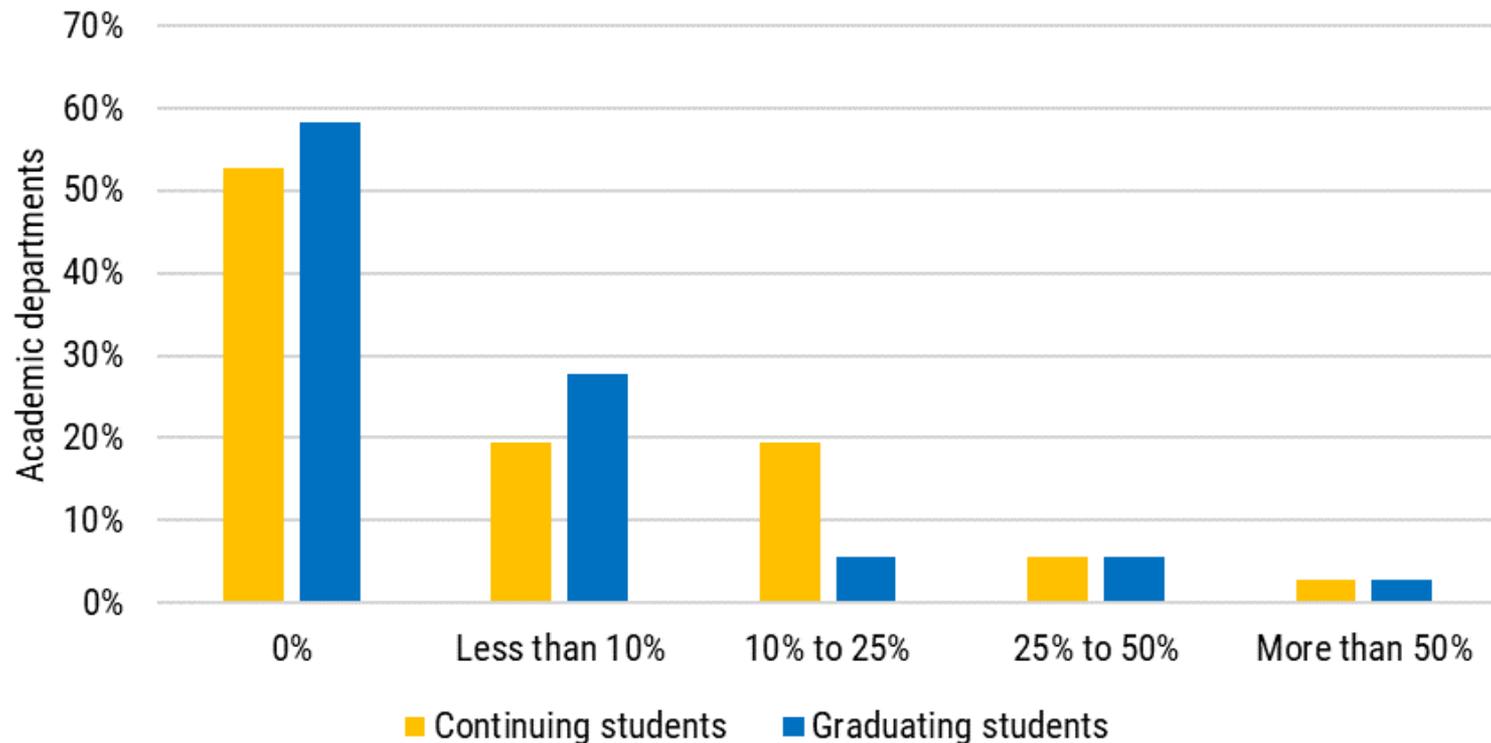
Integrating New Approaches

Plans for integrating virtual lab and field experiences into the curriculum



Percent of Students Unable to Take a Course

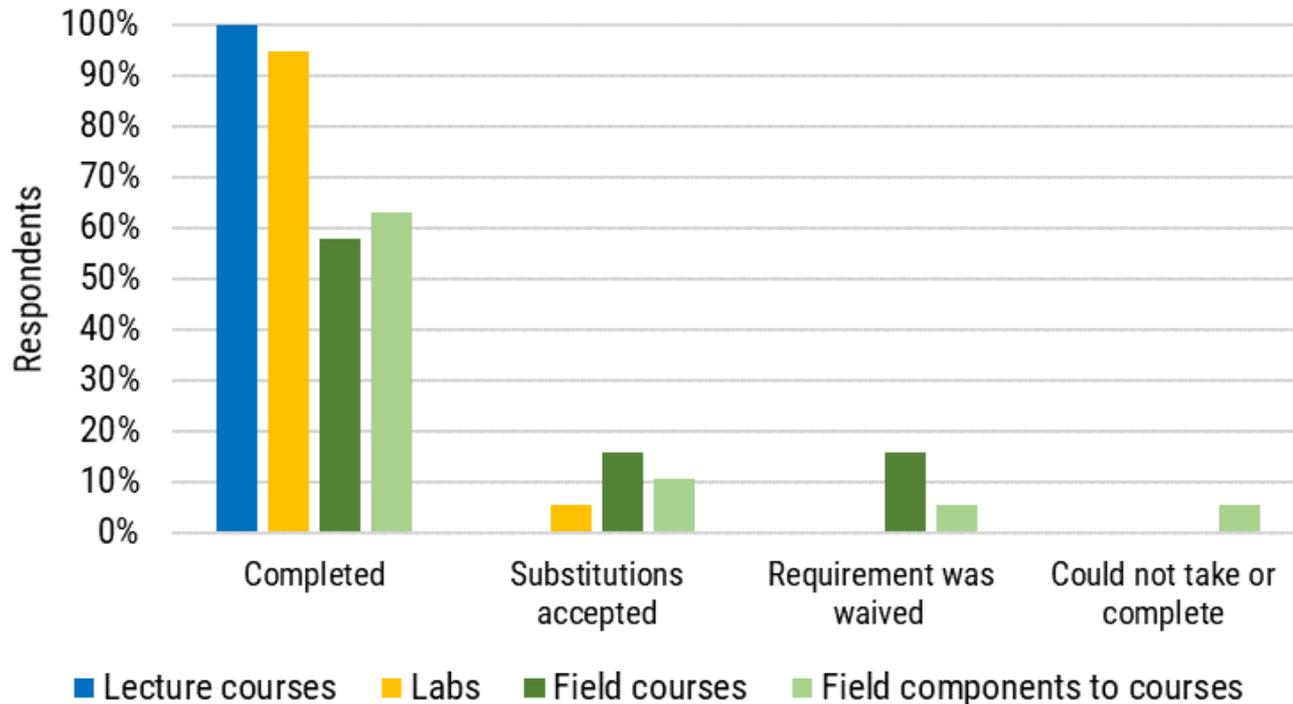
What percentage of geoscience majors in your department were unable to take required courses during the 2020-2021 academic year?



How Degree Completion Was Handled

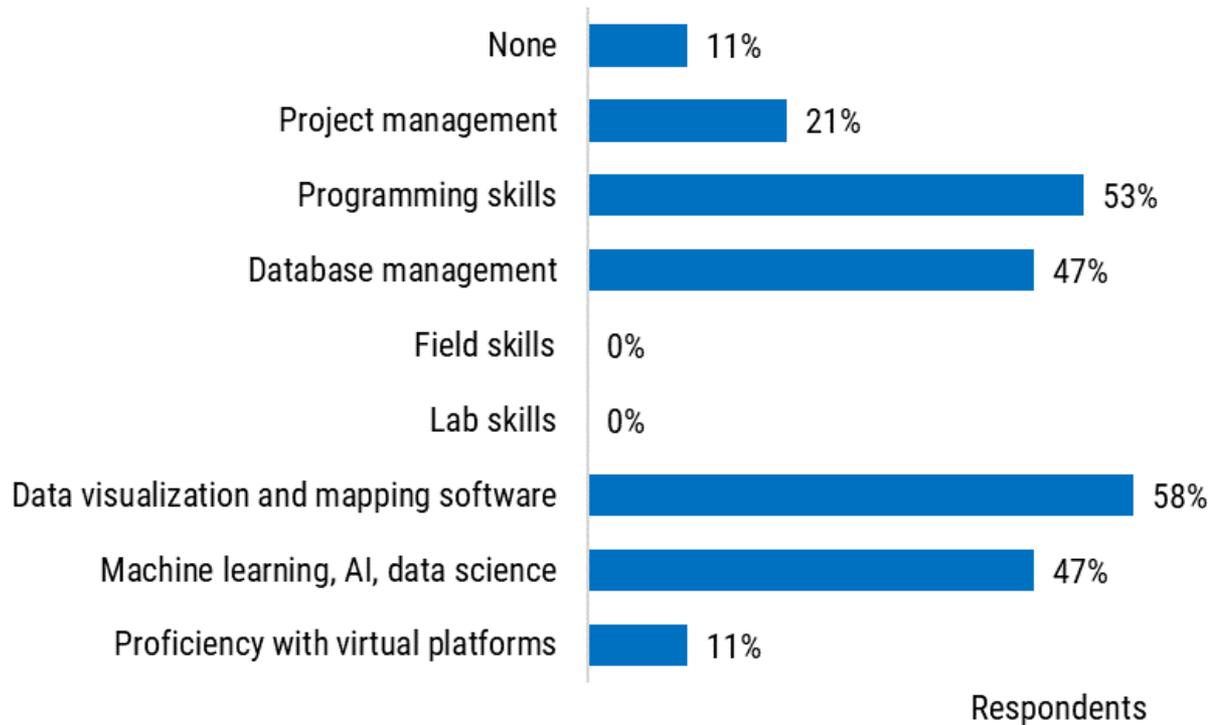
As reported by students

How did you handle courses that were required for your degree completion?



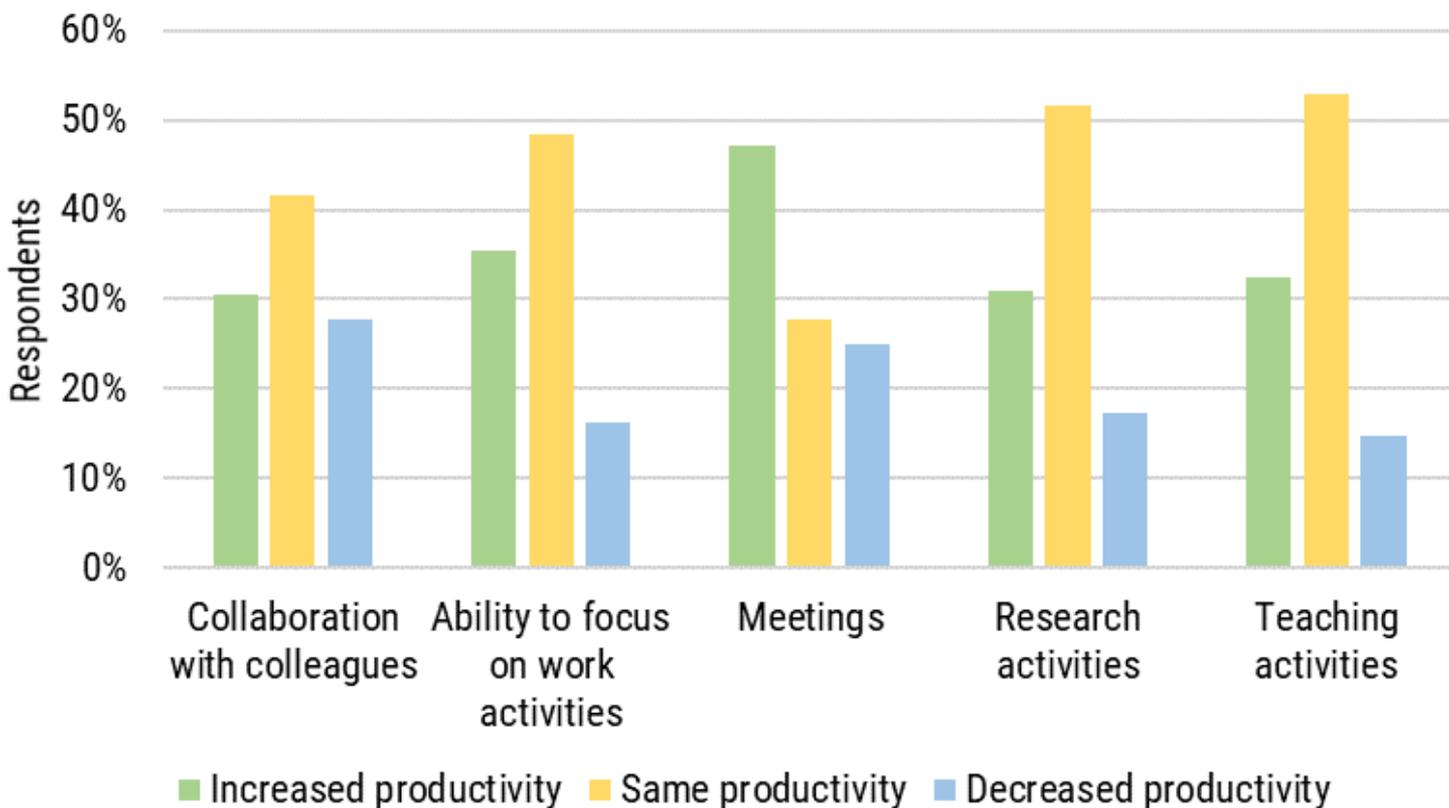
COVID-Era Graduates Skills Reflection

Skills and knowledge graduates wished they acquired before graduating



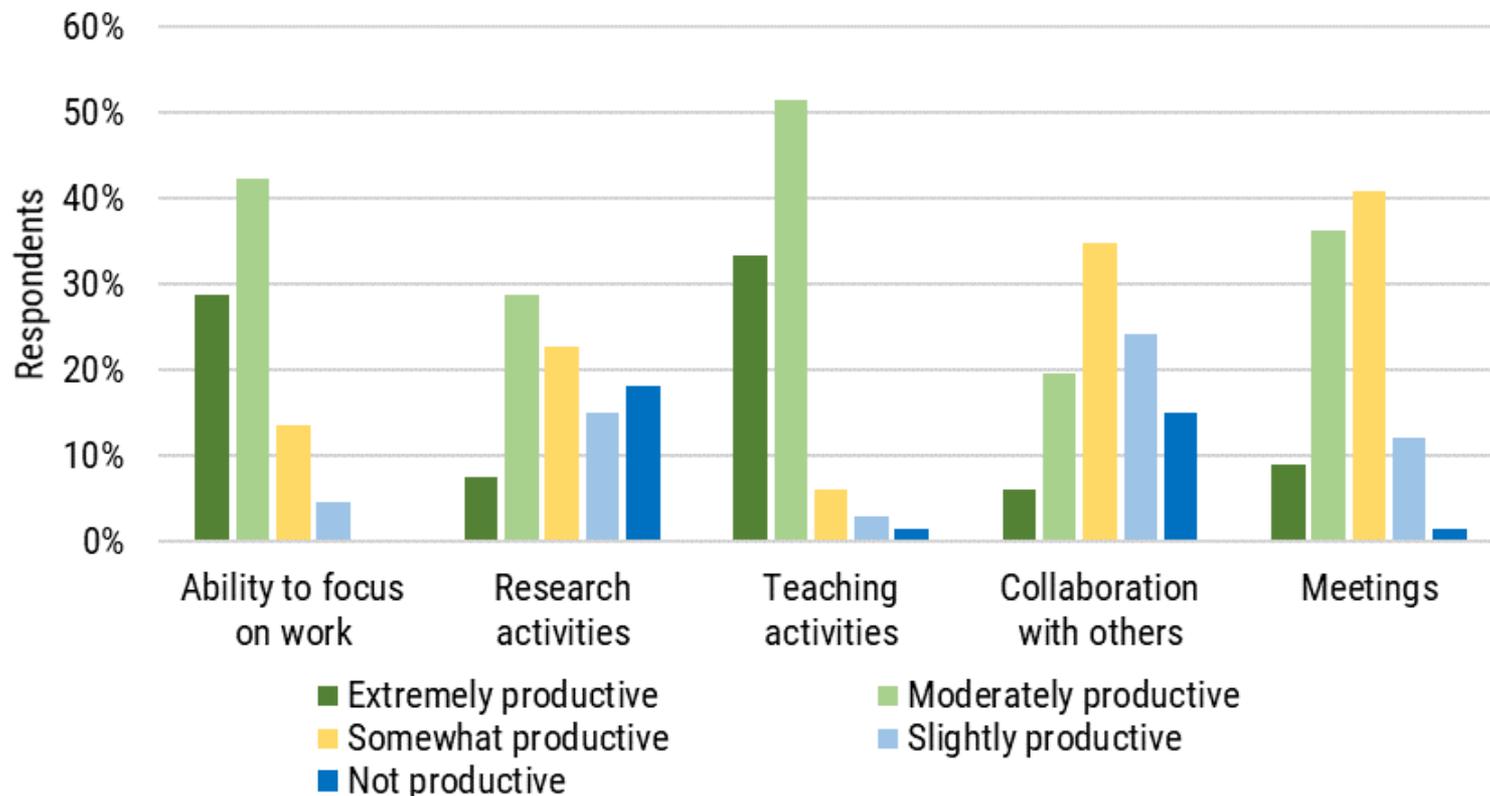
Impacts on Faculty Productivity

Change in faculty Nov 2020 to Mar 2021



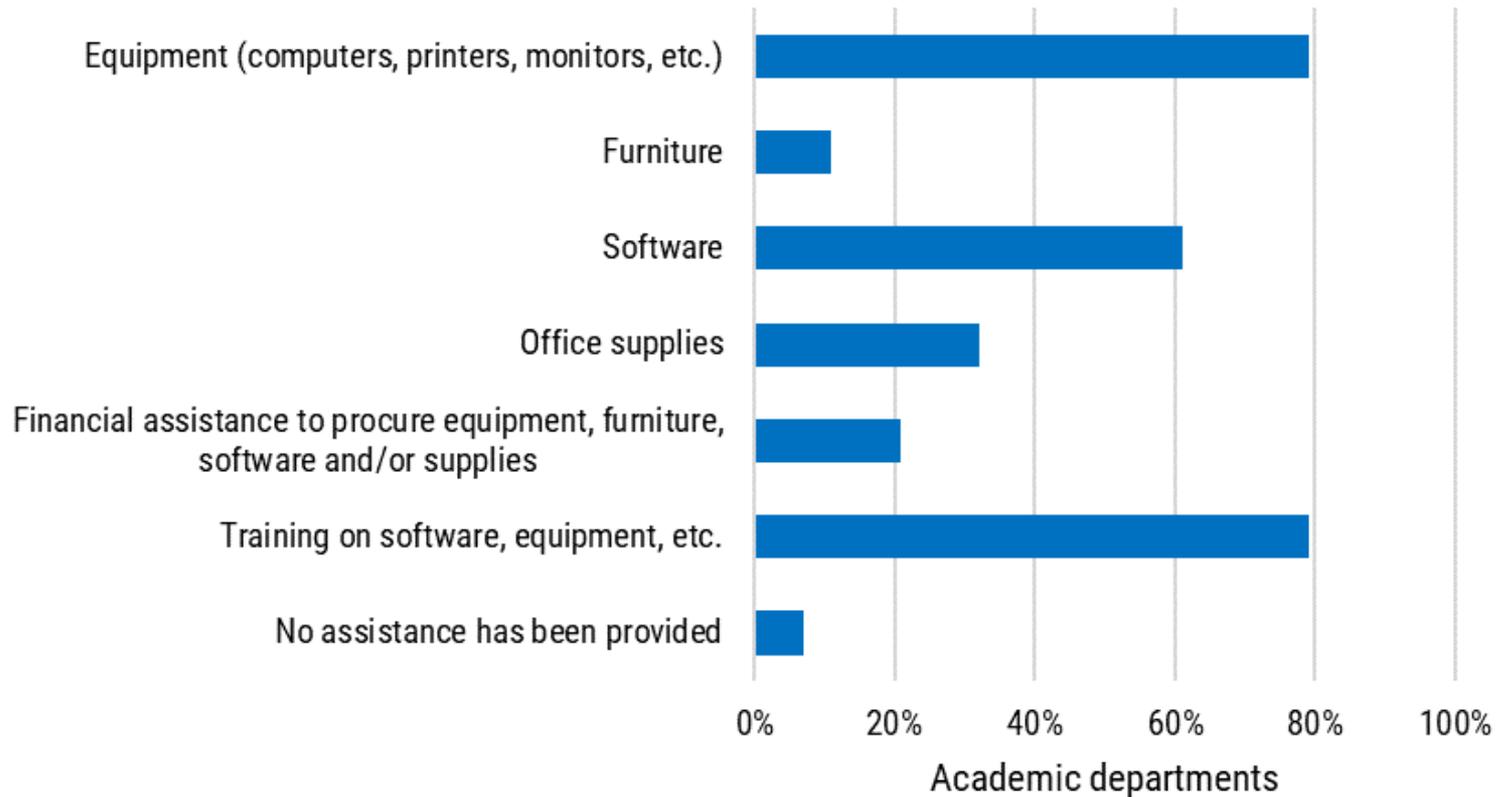
Impacts on Faculty Productivity

Faculty productivity level with remote work, March 2021



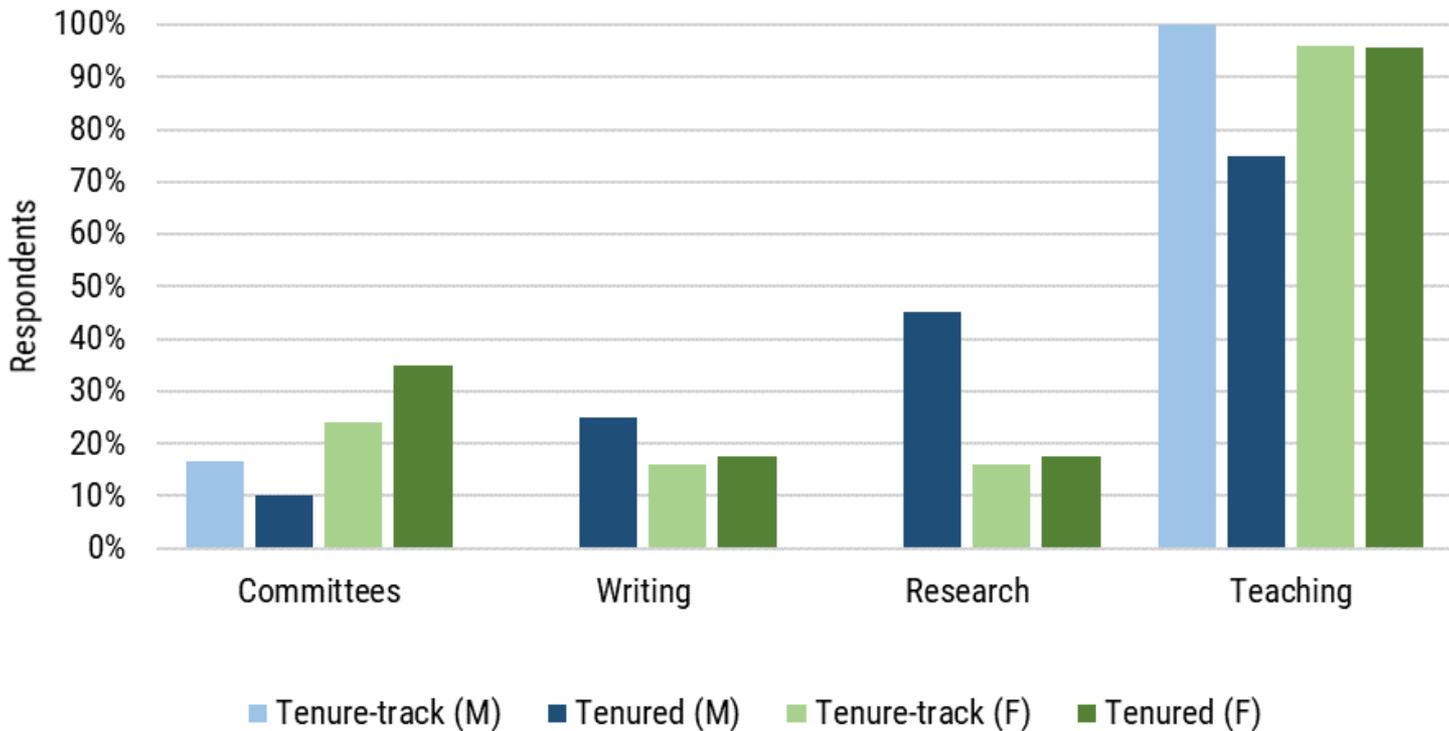
Assistance Provided to Faculty & Staff

Work-from-home assistance provided for faculty and staff

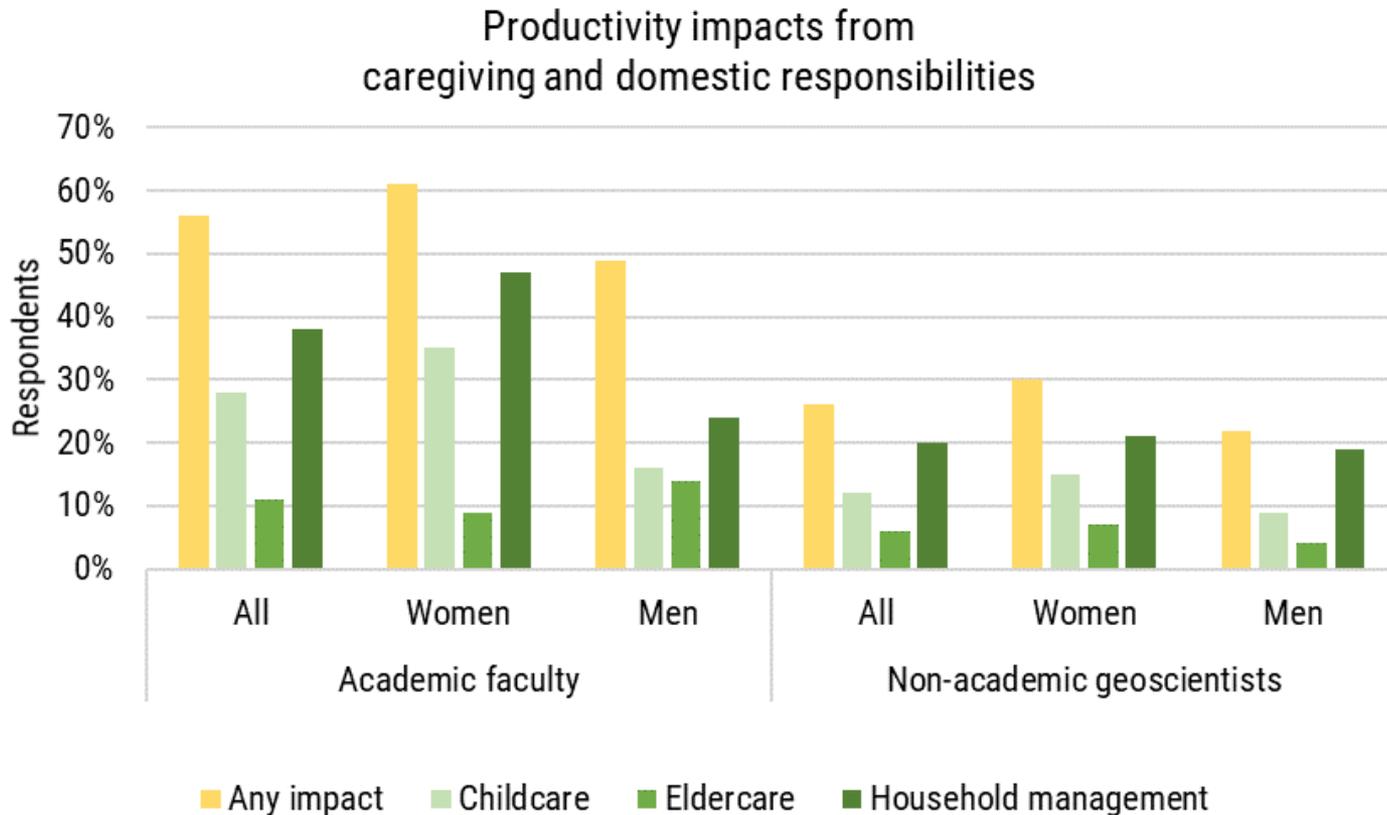


Levels of Effort During COVID

More than 25% of time spent on academic activities
by faculty rank and gender



Home-related Impacts on Productivity



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