

# **COVID-19 impacts on geoscience** K-12 faculty

This data brief provides insights from the most recent results from the Geoscience COVID-19 study regarding impacts to geoscience K-12 faculty during the pandemic. We examine the change in primary work location of K-12 faculty, work and research activities, engagement with professional development activities, and pandemic-related restrictions for facility access, health and safety protocols, and meetings and travel. We also examine the top concerns of K-12 faculty that have been driven by the pandemic.

## Work Location

In February 2020, the primary work location of 94% of K-12 faculty was at their school / office, while 6% of reported that their primary work location was working from home. By May 2020, primary work locations had switched, with 91% of K-12 faculty reporting working from home and 9% reporting working from their employer's office as their primary work location.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

Starting in September 2020, K-12 faculty began to split time between working from home and the office, and in March 2021, the primary work location of K-12 faculty had switched from home to the office. Despite this change in work location, however, 40% of K-12 faculty reported that they did not need to be in the office to perform their work, and 20% reported that it was only slightly necessary for them to be in the office.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

### Work and Research Activities

Online research continues to be the primary work and research mode for geoscience K-12 faculty. Since September 2020, literature review, writing, and editing have been the second most common mode of work and research. Lab-based activities, reported by one-fifth to one-third of K-12 faculty from July through December, increased through the winter months, peaking at in February 2021. Computational research activities were reported by 20% to 30% of K-12 faculty through Fall 2020 and declined in the winter months. In addition, approximately one-tenth of K-12 faculty reported conducting fieldwork activities from June through October 2020 and in February and March 2021.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

### Pandemic-related Restrictions

Access restrictions and limited staffing at facilities continue to be the most common COVID-19 related facility restriction reported by K-12 faculty. While access restrictions have begun to ease, an increasing percentage of K-12 faculty have reported reduced staffing at facilities. Furthermore, since June 2020, an increasing percentage of K-12 faculty reported deferral of field activities. Nearly half of K-12 faculty reported deferral of lab-based activities in November 2020, and this percentage has since declined to 28% in March 2021.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

The use of face masks inside buildings and social distancing continues to be the most common COVID-19 related health and safety protocols reported by K-12 faculty. Since June 2020, an increasing percentage of respondents have reported COVID-19 related health and safety restrictions related to the use of face mask both indoors and outdoors, use of personal protective equipment, COVID-19 testing, and temperature checks.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

Virtual meetings were the most common COVID-19 related meeting and travel restriction reported by K-12 faculty through January 2021, but was surpassed by restrictions prohibiting travel and outside visitors. In March 2021, 61% of K-12 faculty reported restrictions preventing travel, 56% reported restrictions preventing outside visitors, and 56% reported having to only use virtual meetings. The percentage of K-12 faculty reporting isolation policies after travelling remained over 20% for most of July 2020 through March 2021.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

#### **Professional Development**

K-12 faculty engaged in a variety of professional development activities during the pandemic, with most attending virtual workshops or conferences, webinars, or taking online courses. Approximately half of K-12 faculty reported taking



online courses from June through August 2020 and webinars between June and October 2020.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

Over half of K-12 faculty also reported mentoring students and colleagues during the 2020-2021 academic year. Engagement in community outreach and professional society activities were the least reported professional development activities reported by K-12 faculty.

#### Concerns

For K-12 faculty, workplace safety continues to be the top concern moderately to extremely driven by the pandemic although the concern has lessened since September 2020. In March 2021, there was a large increase in the percentage of K-12 faculty reporting concerns related to academic rigor, educational opportunities, and employment opportunities that were moderately to extremely driven by the pandemic.



Credit: AGI, data from AGI's Geoscience COVID-19 Impacts Study

of COVID-19 on the geoscience enterprise throughout the year. For more information, and to participate in the study, please visit: www.americangeosciences.org/workforce/ covid19

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We will continue to provide current snapshots on the impacts

