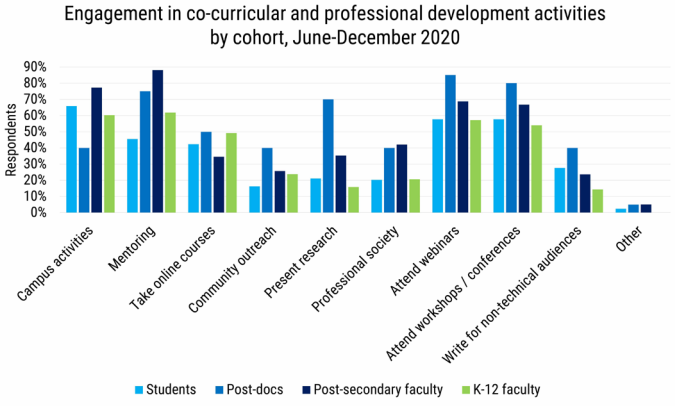
# Engagement in co-curricular and professional development activities during the pandemic

In this data brief, we examine how engagement in co-curricular and professional development activities have varied during the pandemic. Since June, attending webinars was the only activity that ranked in the top three co-curricular and professional development activities across all survey populations. The webinar and extra-curricular online course topics reported to be taken include water and energy resource management, environmental remediation, geology, hazards, online teaching, career issues, ethics, diversity, equity and inclusion, technology and applications, computer science (i.e., programming, machine learning, etc.), business operations, and communication skills. Courses and webinars were typically hosted by government agencies or non-profit organizations.

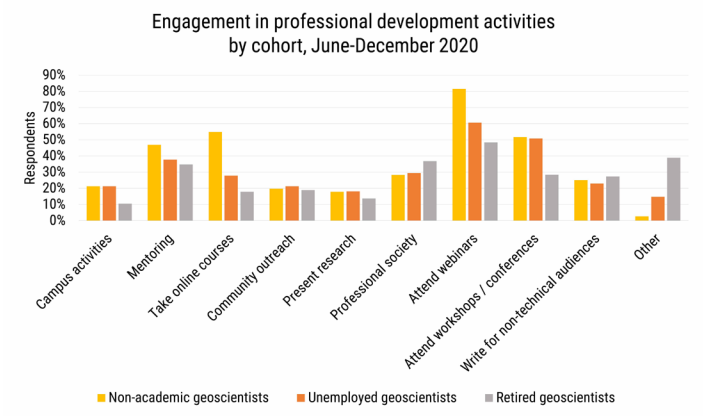



Credit: AGI; data from AGI's Geoscience COVID-19 Survey

Between June and December, the top three developmental activities reported by students also included campus activities, such as involvement in departmental committees, campus clubs, or student government, and attending workshops or conferences. With the beginning of the Fall term, student engagement in campus activities increased by nearly 20% since July, peaking at 72% in October. Other increased engagements included mentoring of other students and colleagues, with 48% of students reporting this activity in November. Other activities with growth between June and December included community outreach and presenting research at a conference, colloquium, or public event. The percentage of students taking extra-curricular online courses declined from 30% of students in June to 13% in December.

Post-secondary teachers reported engagement in campus activities, and mentoring students and colleagues among their top three professional development activities. The percentage of post-secondary faculty mentoring students and colleagues increased to 87% in November, up from 67% in June. In addition, engagement in campus activities increased from 49% of post-secondary faculty reporting this activity in July to 79% in October. During Fall, there were increases in the percentage of post-secondary faculty attending workshops and conferences as well as presenting research in these types of forums (as well as in departmental colloquia and at public events). Declines in participation in webinars and online classes occurred between June and December, with one-third of post-secondary faculty reporting attending webinars in December, down from 57% in June, and 11% of post-secondary faculty reporting taking online classes in December, down from 25% in July.

K-12 faculty reported engagement in campus activities and mentoring students and colleagues among their top three professional development activities in addition to attending webinars. With the start of the Fall term, there was a concurrent increase in the percentage of K-12 faculty mentoring students and colleagues, with three-quarters of K-12 faculty reporting this activity in December. The percentage of K-12 faculty attending webinars peaked at 71% in October, up from 54% in June. The percentage of K-12 faculty attending workshops and conferences peaked in July and August (40% and 42%, respectively) and again in November and December (50% and 58%, respectively). The percentage of K-12 faculty attending online classes peaked in August at 54% and thereafter declined to 17% in December.

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In addition to webinars, the top three activities between June and December reported by non-academic geoscientists included mentoring colleagues and students, with third place split between attending online classes (June through August) and attending workshops and conferences (September through December). The percentage of non-academic geoscientists actively volunteering for professional societies increased to 28% in November, up from 18% in June. The percentage of non-academic geoscientists engaged in mentoring colleagues and students also peaked in November at 46%, up from 29% in June. Activities where there were declines in participation included online classes (from 43% in July to 26% in December) and webinar attendance (74% in July to 66% in December).

Retired geoscientists also reported mentoring colleagues and students and actively volunteering for professional societies among their top three professional development activities. Active volunteering for professional societies increased from 18% of retirees in July to 41% in December. Participation in webinars also increased over this period. Participation in other activities peaked in July through September (29%, 45%, and 33% over the three months respectively), with most retirees engaging in research projects and editing or reviewing journal articles during this time.

Unemployed geoscientists reported mentoring colleagues and students and attending workshops and conferences in addition to attending webinars as their top three professional development activities. The percentage of unemployed geoscientists taking online classes and attending webinars increased between June and December, 29% to 50% and 50% to 63%, respectively. In addition, the percentage of unemployed geoscientists actively volunteering for professional societies also increased, from 21% in June to 50% in December. Also, the percentage of unemployed geoscientists writing for non-technical audiences increased in the last quarter of 2020, from 14% to 25%. Participation in workshops and conferences peaked in June and July (50% and 42% respectively) as well as in October and November (45% and 41% respectively).

We will continue to provide current snapshots on the impacts 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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