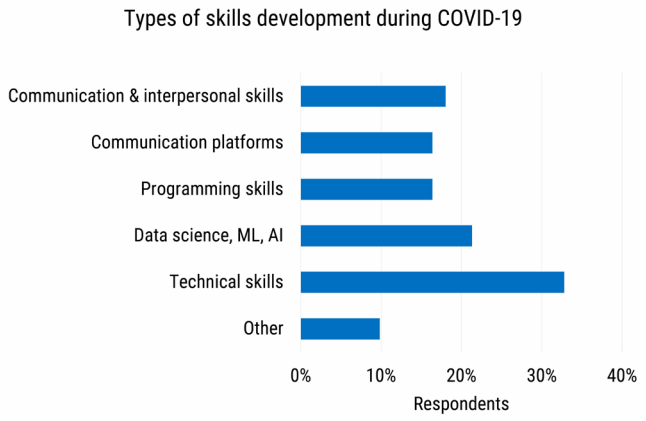
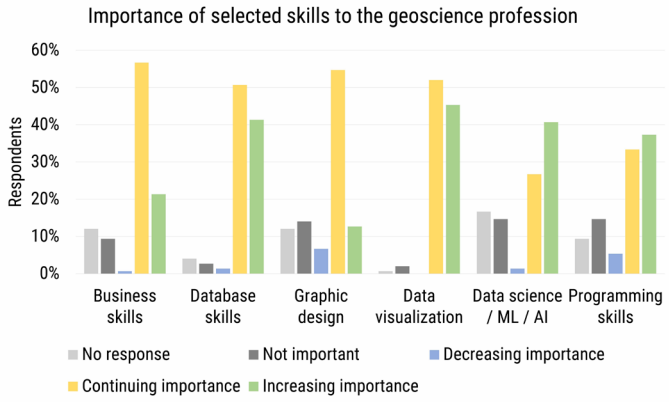
# Skills development during COVID-19: Non-academic geoscientists

When asked about skills development during COVID-19, one-third of non-academic geoscientists reported spending time developing geoscience technical skills related to geospatial analysis, groundwater management, contaminants and remediation, mining technologies, and specific lab equipment. In addition, one-fifth of respondents worked on developing skills related to data management and analysis, data science, machine learning, and artificial intelligence, and 16% spent time developing their programming skills, mostly in Python and R. Eighteen percent of respondents spent time on improving their communication and interpersonal skills, while 16% spent time learning how to use communication technology platforms to streamline workflows and collaborate better with others.




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

In February 2021, we surveyed participants about their perspectives on both the importance of business skills, database skills, graphic design, data visualization, and data science to the geoscience profession and on their proficiency with these skills. Over two-thirds of respondents reported that all of these skills are of continuing or increasing importance to the profession. The top three skills that were of increasing importance to the profession were data visualization and mapping software/platform skills (i.e., GIS, Tableau, etc.), database management and development, and machine learning, artificial intelligence, and data science. While 56% of respondents reported having an intermediate or higher level of proficiency with data visualization and mapping software / platforms, only 44% of respondents reported the same level of proficiency with database skills. Furthermore, only 7% of respondents reported having an intermediate or higher level of proficiency with machine learning, artificial intelligence, and data science.

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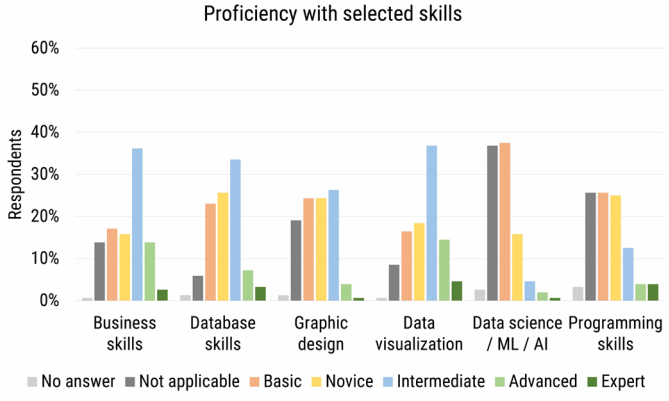


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We will continue to provide current snapshots on the impacts of COVID-19 on the geoscience enterprise throughout the year. For more information, and to participate in the study, please visit: https://www.americangeosciences.org/workforce/covid19

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