What was the “Mind the Gap” workshop?
A gap exists between meteorology/atmospheric science student career awareness and skill sets, and a growing number of private-sector career opportunities. A group of private sector professionals, students, and university faculty members assembled to discuss ways to reduce this gap. The first “Mind the Gap” workshop (MtG) was held at NCAR in 2019, and a follow-up workshop, “MtG2”, was held at the University at Albany in June of 2022. Below is a summary of takeaways and resources from the MtG2 workshop.

What is the “gap”?
- Does the modern AMS curriculum adequately prepare students to compete and succeed in the emerging job market in weather and climate outside of NWS/academia?
- Are students (current/prospective) and faculty aware of the wide range of career paths and earning potential in this emerging job market?

Key takeaways in addressing the gap:
- Core skills: Greater emphasis on skills beyond traditional dynamics/forecasting
  - Statistics (including extremes), programming (python) and version control (github)
  - Amenable to teaching in a traditional classroom setting
- Workplace skills: Greater and explicit curricular emphasis on functional skills for a valuable and productive team member
  - Communication to wide ranges of audience (from specialist to layperson), resourcefulness, time management, co-production and collaboration.
  - Best developed via simulating real-world job environments in which students must answer open-ended questions to solve real-world problems. Student leadership and ownership, responding to feedback, and overcoming obstacles and failures. Can be integrated into all courses from short to long formats.
- Current NOAA curriculum requirements (“1340 series”) is focused on forecasting and other traditional meteorology roles. The modern job market encompasses a wide range of career options that are sometimes poorly-served by this track. There is a need to consider additional/broader track options that expand on skills outside of traditional dynamics/forecasting. The AMS curriculum standards are somewhat more flexible than NOAA’s, but may also require additional broadening, MtG2 participants are contributing to updating the AMS standards.
- Need to increase student awareness of industry opportunities at all levels, starting with incoming students. Opportunity for AMS to organize career videos into an introductory career development short course that could be rapidly and widely adopted by departments.
- Accessible community hub of teaching resources (e.g. modules) to reduce barriers for faculty to fill these gaps in their classrooms — As of Fall 2022, there is a COMET grant to support this effort.
- MtG2 attendees are represented on the committee preparing the AMS Best Practice Statement on Preparing Students for the Private Sector

Appendix A: Resources and career opportunities
- Mind the Gap workshop website
- AMS career preparation (a list of skills/elective suggestions by sector/industry)
- AMS career resource page (podcasts about different jobs in atmospheric science)
- Project Pythia (“an education and training hub for the geoscientific Python community”)
- Pangeo (Python resources for the geoscience community)

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