



Problem Question for 2024 NC Education Datathon

EVENT DESCRIPTION

The goal of the NC Datathon is to leverage technology and data to develop innovative solutions for addressing complex problems. This event will bring together university and student-led teams from across North Carolina. Teams are challenged to solve an education-related problem by using multiple sources of data. With the support of industry mentors, teams will work to develop applications, dashboards, and/or solutions to the problem and then present their projects to a panel of expert judges and conference attendees who vote for the best team. The two-day event will include keynote speakers, team work time, presentations, judging, and awarding of winners.

Connecting Career and Technical Education (CTE) and North Carolina Workforce Needs

The COVID-19 pandemic had a major impact on the United States unemployment rate and job openings. At the end of 2020, [10.7 million](#) workers were unemployed, and 6.65 million jobs were vacant. Even prior to the pandemic, the disparity between the jobs available and the skillsets of job seekers – also known as the skills gap – was a concern. In a 2019 survey, [75 percent](#) of human resource professionals stated they had difficulties recruiting candidates for a job because the candidate pool lacked the requisite skills. As North Carolina works to [ensure](#) that high school graduates are prepared for success in a 21st-century place of work, it is crucial that schools are offering career and technical education programs and experiences that are aligned with the state's workforce needs.

Questions to consider:

- What are the state's short and long-term workforce needs?
- How are K-12 schools currently preparing students to meet those workforce needs?
- Do all students have access to workforce development courses and programs?
- How could North Carolina better align career and technical education with the state's workforce needs?

Data Sources:

- United States Census Bureau Data - <https://www.census.gov/>
- NC's Official Labor Market Data Source (NC Department of Commerce) - <https://d4.nccommerce.com/>
- NCDPI State and School Report Cards - <https://ncreports.ondemand.sas.com/src/state?year=2022&lng=en>
 - <https://www.dpi.nc.gov/data-reports/school-report-cards/school-report-card-resources-researchers>
 - <https://www.dpi.nc.gov/data-reports/school-report-cards/data-sources-and-information-guide>
- Perkins State Plans and Data Explorer - https://cte.ed.gov/dataexplorer/build_enrollment

- NC Tower Data - <https://tower.nc.gov/>
- NC Careers Data - <https://nccareers.org/look-new-job/search-for-a-job>
- NC Prosperity Zones – <https://www.ncse.org/>
- NC Main Street & Rural Planning Center - <https://www.ncmainstreetandplanning.com/>
- NC List of Essential and Career Credentials - <https://nccareers.org/credentials/credentials-list>