Tulane to use artificial intelligence to study how nation’s schools are responding to coronavirus

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The project, which will track traditional public schools, charter schools and private schools, aims to quickly answer questions that are critical for understanding how students are learning when school buildings are closed.

The U.S. Department of Education’s Institute of Education Sciences has awarded the National Center for Research on Education Access and Choice (REACH) at Tulane University a $100,000 contract to collect data from approximately 150,000 school websites across the country to see how the nation’s education system is responding to the coronavirus pandemic.

The project, which will track traditional public schools, charter schools and private schools, aims to quickly answer questions that are critical for understanding how students are learning when school buildings are closed. Key questions include: how many schools are providing any kind of instructional support; which are delivering online instruction; what resources are they offering to
students and how do students stay in contact with teachers?

“This data will also help answer important questions about equity in the school system, showing how responses differ according to characteristics like spending levels, student demographics, internet access, and if there are differences based on whether it is a private, charter or traditional public school,” said REACH National Director Douglas N. Harris, Schlieder Foundation Chair in Public Education and chair of economics at Tulane University School of Liberal Arts.

REACH will work in cooperation with Nicholas Mattei, assistant professor of computer science at Tulane University School of Science and Engineering, to create a computer program that will collect data from every school and district website in the country. Due to the large volume and variety of data across the thousands of sites, the data will be analyzed using techniques from artificial intelligence (AI) and machine learning.

In addition, REACH will hire more than a dozen Tulane students to manually collect data from a random sample of around 3,600 school websites to inform the AI work with more in-depth, human analysis.

“Because of the urgency of the project, our aim is to release an initial summary of the results early this summer, in time to inform actions for the coming school year,” Harris said. “Once the initial analysis is complete, the data will be released to the public so that researchers, policymakers and journalists can study the different approaches that schools are taking and see which are more effective in helping students.”

The research project is an extension of a $10 million grant awarded to REACH in 2018 for research on school choice nationally.