Dr. Joshua Adams

“Data! Data! Data! I can’t make bricks without clay.” Sir Arthur Conan Doyle
In education, data is the clay used to create the bricks of teaching and learning. In this Faculty Spotlight, Dr. Joshua Adams shares how project based learning can be strengthened through data collection and analysis tools. He highlights Microsoft Azure and Google Cloud Services as practical resources that support instruction and research across many disciplines, including business, education, health professions, math, science, and social sciences. Adams also explains how interested faculty can gain access, training, and support for these tools.
Project based learning asks students to actively engage in solving a problem or complex challenge, and one essential skill in that process is data collection and analysis. While cloud computing may feel unfamiliar, Adams encourages faculty to approach it with confidence. “Cloud computing is definitely impacting every industry out there,” says Adams. He has worked with colleagues from Carnegie Mellon University, Sacred Heart University, and the University of Glasgow in Scotland to help build cloud computing curriculum designed for use in courses of any topic, so students can gain exposure to technology they are likely to encounter in their careers.
Cloud tools can also help remove barriers for students who may not have powerful devices. “Students don't have a lot of resources locally. They may have a very limited Chromebook or very limited laptop which they can do things with. If we are utilizing cloud resources, they're getting one experience using this technology and they don't have to purchase some so really beefy desktop or laptop in order to actually do their lab experience or homework.” In COM 203, for example, students use cloud platforms to develop a website using guided learning spaces and gain a clearer view of how websites work behind the scenes.
To help with cost, Adams can obtain educational credits through Microsoft and Google programs, which are available beyond computer science and can support faculty across Saint Leo’s programs.