New software tool to provide students with personalized feedback to improve learning

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Dr. George Siemens. Credit: UTA

Researchers at The University of Texas at Arlington have partnered with five international universities to create a software tool that provides timely and personalized feedback to help students adjust their studying throughout the course.

The [online tool, OnTask](#), uses data about students' activities throughout the semester and helps instructors to provide suggestions on specific assignments and strategies that enable students to adjust their studying throughout the course in order to be more confident and successful.

The [tool](#) uses data from video engagement, assessments, [student](#) information systems, electronic textbooks and discussion forums.

"An important benefit of OnTask is the ability for teachers in large classrooms to still provide individual feedback to each student," said George Siemens, executive director of The University of Texas at Arlington's Learning Innovation and Networked Knowledge Lab or LINK Lab.

"This combination of machine learning and human-supported decision-making holds promise in making our goal of providing greater support to students a reality in UTA's classrooms," he added.

UTA plans to pilot OnTask for an online course beginning in fall 2017.

Funded through a Strategic Priority Commissioned Grant by the Office of Learning and Teaching of the Australian government, the OnTask project is led by the University of Sydney, in collaboration with the University of Technology Sydney, the University of New South Wales, the University of South Australia, the University of Edinburgh and UTA.Abelardo Pardo, fellow research scientist for LINK Research Lab and the principal investigator for OnTask, piloted the system in March 2017 at the Learning Analytics and Knowledge Conference in Vancouver.

"The interaction with users confirmed the need for tools that explicitly address the connection between the data captured and actions needed to support students in a learning experience," Pardo said.

Pete Smith, UTA's chief analytics officer, emphasized the importance of this work within the [university](#)'s focus on data-driven discovery in the Strategic Plan 2020: Bold Solutions|Global Impact.

"UTA's LINK lab collaborative projects are putting the university at the forefront of research into digital learning," Smith said. "Testing the tool here at UTA is also an important opportunity for both our students and researchers to prove the validity of the tool for online courses."

More information: www.ontasklearning.org/

Provided by University of Texas at Arlington