

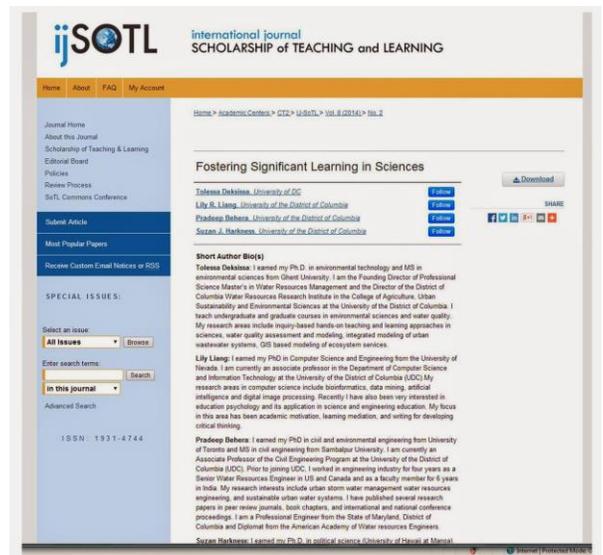
UDC Faculty Published in the International Journal for the Scholarship of Teaching and Learning

Congratulations to Drs. Tolessa Deksissa, Lily Liang, Suzan Harkness and Pradeep Behera for having their research published in the *International Journal for the Scholarship of Teaching and Learning*! The four UDC faculty members co-authored, "Fostering Significant Learning in Sciences," about experiential learning as taught in [Summer Bridge in Environmental Science and Technology](#), a program funded by the National Science Foundation. The four week course was designed to provide high school and incoming college students with the essential skills necessary to succeed in college studies and beyond, while attracting them to the STEM disciplines of science, technology, engineering and mathematics. Here's the abstract for the scholarly article:

Abstract

The new global economy depends on workforce competencies in science, technology, engineering and mathematics more than ever before. To prepare a strong workforce, attracting and educating underrepresented minority students in science is a challenge within our traditional American educational approach. To meet this challenge, fostering significant learning in science that nurtures 21st Century skills in students is crucial. The purpose of this study was to analyze the effectiveness of a set of teaching and learning approaches that foster significant learning in sciences. Using a new introductory environmental science course in urban water quality management, the effect of a set of learner-centered teaching approaches, including hands-on learning, scientific inquiry, frequent feedback, and critical thinking exercises, was analyzed. The results of the pre- and post-course survey questions together with formative and summative assessments showed that our students' cognitive learning skills and interests in learning science were significantly improved.

[Read the full research article.](#)



The screenshot shows the IJSTOL website interface. The main content area displays the article title "Fostering Significant Learning in Sciences" and lists the authors: Tolessa Deksissa, Lily R. Liang, Pradeep Behera, and Suzan J. Harkness. Below the authors, there is a "Short Author Bio(s)" section with brief biographies for each author. The website also features a search bar, a navigation menu, and social media sharing options.

[Dr. Deksissa](#) is the Director of the Water Resources Research Institute, UDC's Professional Science Master Program in Water Management and the Environmental Quality Lab, all housed under the College of Agriculture, Urban Sustainability and Environmental Sciences (CAUSES) of the University of the District of Columbia. Dr. Lily Liang is an Associate Professor of Computer Science and Information Technology, Dr. Pradeep Behera, Associate Professor of Civil Engineering and Dr. Suzan Harkness, UDC Associate Professor of Political Science and Special Assistant to the President.

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