

OFFICE OF EDUCATIONAL MEASUREMENT, EVALUATION, AND ANALYTICS

Research and data-driven insights about how undergraduates learn, flourish, and navigate through college.

VIJI SATHY & ABIGAIL PANTER

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ASSESSMENT

How can the curricula be informed and improved with assessment efforts?

2

PROGRAM EVALUATION

How do we evaluate higher education initiatives that aim to provide innovative programs, teaching practices, and services to students?

3

DATA VISUALIZATION AND DASHBOARDS

How do we improve systems to put data into the hands of educators and administrators to evaluate inclusion and equity (or improve student success)?

4

INNOVATIVE METHODOLOGICAL DIRECTIONS

How can state-of-the-art data analytic approaches be harnessed to improve measures of teaching effectiveness?

1 ASSESSMENT

- HIGH STRUCTURE ACTIVE LEARNING: MULTI-MODAL ASSESSMENT
- UNC CHECK-IN APP
- MATH PATHWAYS: QUANTITATIVE OFFERINGS IN GENERAL EDUCATION

2 PROGRAM EVALUATION

- CHANCELLOR'S SCIENCE SCHOLARS, SUMMER BRIDGE, LOOKOUT SCHOLARS
- IDEAS IN ACTION: UNC'S NEW GENERAL EDUCATION CURRICULUM
- KEEN ENTREPRENEURIAL ENGINEERING

3 VISUALIZATIONS AND DASHBOARDS

- INCLUSIVE TEACHING: MY COURSE ANALYTICS DASHBOARD
- DASHBOARD FOR PROGRAM LEADERS
- ACADEMIC DEPARTMENT PROFILES

4 INNOVATIVE METHODOLOGICAL DIRECTIONS

- NATURAL LANGUAGE PROCESSING: STUDENT EVALUATIONS OF TEACHING
- PSYCHOMETRIC ANALYSES: STUDENT EVALUATIONS OF TEACHING
- THE FINISH LINE PROJECT: RANDOMIZED CONTROLLED TRIALS

ASSESSMENT **How can the curricula be informed and improved with assessment efforts?**

QUANTIFYING HIGH STRUCTURE ACTIVE LEARNING

How do we conduct a multi-modal assessment of high-structure active learning in teaching approaches now and over time?

Sathy, Panter, & Hogan

UNC CHECK-IN APP

How can faculty and students view their attendance record using the new UNC Check-In App? How can faculty quickly identify students with attendance issues and connect them to campus resources?

Sathy & ITS-Learning

MATH PATHWAYS VIA DATA LITERACY

How do we create and expand Math Pathways and quantitative offerings in general education? How can we harness interest in data science and literacy to provide high quality introductory quantitative reasoning courses?

Green, Sathy, Vision, McLean, McLaughlin, & Panter

PROGRAM EVALUATION

How do we evaluate higher education initiatives that aim to provide innovative programs, teaching practices, and services to students?

CURRICULUM EVALUATION

How do we evaluate the fidelity of the new "Ideas In Action" General Education Curriculum, as well make modifications as needed?

Panter, Sathy, Hutson, Williford, & Thompson

CHANCELLOR'S SCIENCE SCHOLARS

How do we support underrepresented students, diversity, and inclusion in STEM in the Chancellor's Science Scholars Program? How do we equip students for postgraduate success in science fields?

Sathy, Panter, & CSS Graduate Research Team

SUMMER SUCCESS PROGRAMS

How do we evaluate the short-term and long-term success of the student success programs (e.g., Carolina Summer Bridge Program, Lookout Scholars) and ensure its efficacy for all participants?

Sathy, Panter, & Program Staff

ENTREPRENEURIAL MINDSET

How do we evaluate the implementation of design thinking in and access to the KEEN Entrepreneurial Engineering Program through coursework and faculty development support?

Sathy, Panter, Hogan & Hutson

ETS SUCCESS NAVIGATOR TOOL

How can tools like ETS' Success Navigator improve our understanding and offerings of resources for underrepresented students who intend to major in STEM and pursue graduate degrees?

Sathy, Panter, Maton, Oseguera, & Staples with ETS

MULTI-SITE EVALUATION OF URM STUDENTS IN STEM

What do we know about how STEM underrepresented students develop their scientific identity over time and the impact of different components of programs designed after the Meyerhoff?

Sathy, Panter, Maton, Oseguera, & Staples

VISUALIZATIONS & DASHBOARDS

How do we improve systems to put data into the hands of educators and administrators to evaluate inclusion and equity (or improve student success)?

MY COURSE ANALYTICS DASHBOARD

How do we provide data to faculty to improve their teaching and promote inclusive teaching practices?

Sathy, Hogan, Clarke, Henshaw, Ricks, Boehm, & Panter

PROGRAM LEADER DASHBOARD

How do we pool existing data across multiple programs to improve efficiency of services and the student experience navigating different offices on campus?

Waldie, Sathy, Panter with the Undergraduate Education Assessment Council

ACADEMIC DEPARTMENT PROFILES

How do we provide data to decision-makers in academic departments to identify important student pathways?

Panter, Sathy, Williford, & Ricks

INNOVATIVE METHODS & DIRECTIONS

How can state-of-the-art data analytic approaches be harnessed to improve measures of teaching effectiveness?

STUDENT EVALUATIONS OF TEACHING

What do state-of-the-art analyses tell us about the quantitative and qualitative responses that students provide about their courses?

Panter, Sathy with UNC collaborators: Bansal, Zhang and UCLA collaborators: Cai, Sturm Huang**

PROPENSITY SCORES IN SMALL SAMPLES

How can researchers know what the effect of an intervention is when the intervention participants were highly selected at the start?

Greifer, Panter, Sathy*

SELF-REGULATED LEARNING

How can researchers use data from thousands of past science students to nudge current students to perform academic behaviors associated with STEM success?

Greene, Bernacki, Gates, Panter, Urban with Hogan, Evans, Sathy*

THE FINISH LINE PROJECT

Does a first year science of learning focused on self-regulated learning benefit first generation college students? What differences emerge across conditions on conceptual knowledge and strategy use?

Greene, Lobczowski, Freed, Cartiff, Demetriou, Panter