

Federal Research Investment from NSF: NEW YORK

About NSF

As the federal agency charged with the advancement of scientific progress across all of the fields of science and engineering, the National Science Foundation (NSF) is the cornerstone of America's basic scientific research enterprise. NSF's seven directorates fund research in diverse disciplines as well as interdisciplinary, cross-cutting initiatives. Support for education research comes primarily from the Education and Human Resources Directorate and also from the Social, Behavioral and Economic Sciences Directorate.

Examples of NSF-funded Education Research in New York

- The Science and Mathematics Simulated Interaction Model (SIM):**
 Syracuse University researchers are designing and clinically testing simulations for preservice (in training) and induction-stage mathematics and science teachers. The SIM's problem-based methodology challenges novice teachers to enact content and pedagogy, while also helping researchers to accurately and meaningfully assess teacher strengths and misconceptions in mathematics and science. The findings have the potential to yield broader understandings of how novice science and mathematics teachers are transferring the content and pedagogy learned within teacher preparation into actual teacher practice.
- Developing Students Growth Mindsets To Promote Science Learning:**
 This project, based at Teachers College, Columbia University, involves the development and study of an intervention with 9th and 4th graders, with the goal of promoting motivation for science learning. Researchers are seeking to understand how both the psychological obstacles to better performance and pedagogical solutions to these obstacles are of the utmost importance to ensuring improved science outcomes. This research will address this issue by developing and systematically testing interventions available to educators to support science learning in the classroom that focuses on changing children's beliefs about what success in science requires.



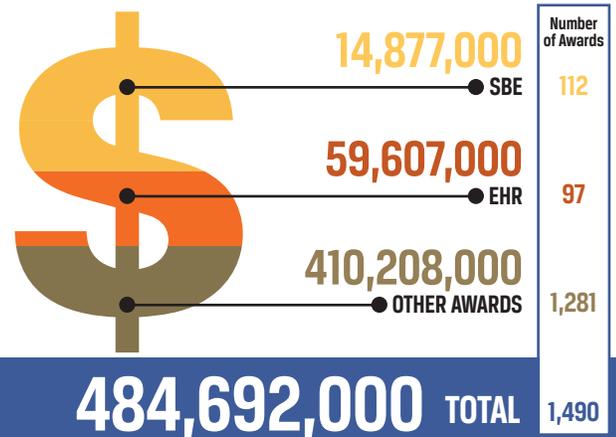
Top 5 NSF-funded Universities in New York

1. Cornell University (\$128,977,000)
2. Columbia University (\$86,862,000)
3. New York University (\$37,969,000)
4. SUNY at Stony Brook (\$35,384,000)
5. SUNY at Buffalo (\$26,175,000)

NSF in New York

- New York received 1,490 awards in FY 2017.
- New York ranks 2nd overall in NSF funding.
- New York received almost 7% of the total NSF award budget in 2017.

New York Funding



Federal Research Investment from IES: **NEW YORK**

About IES

The Institute of Education Sciences (IES) is the federal research agency within the U.S. Department of Education that builds knowledge and informs understanding of education from early childhood through postsecondary to adult workforce.

Research, statistics, and evaluations funded by IES provide policymakers and practitioners with reliable information on the condition and progress of education, educational practices that support learning and improve academic achievement, and the effectiveness of education programs.

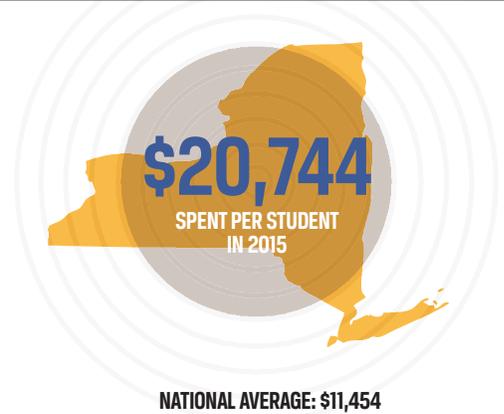
IES Resources for Schools and Educators in New York

- New York received a grant from the National Center for Education Statistics to develop its P20 Longitudinal Data System. The state plans to expand its SLDS to include student-teacher matching and the expansion of the data base to include new data elements and create a data base to support research and policy analysis.
- The IES-funded Center for the Analysis of Postsecondary Readiness, located at Teachers College, Columbia University, conducts research to document current practices in developmental English and math education across the United States, and to rigorously assess the effects of innovative assessment and instructional practices on student success. Projects include the CUNY Start Evaluation and Refining and Evaluating Bronx Community College's First Year Seminar (BCC-FYS).
- The Rochester, Syracuse, New Rochelle, and Yonkers school districts are members of the Northeast & Islands Regional Educational Laboratory's Urban School Improvement Alliance. The alliance's projects include survey tools to enhance the quality of school data that can be used to support improvement, workshops on building a culture of data use within districts and schools, a process to help districts identify their research needs, a toolkit to facilitate more collaborative relationships between districts and external researchers, and a training in data use for school boards.

IES Online Resources

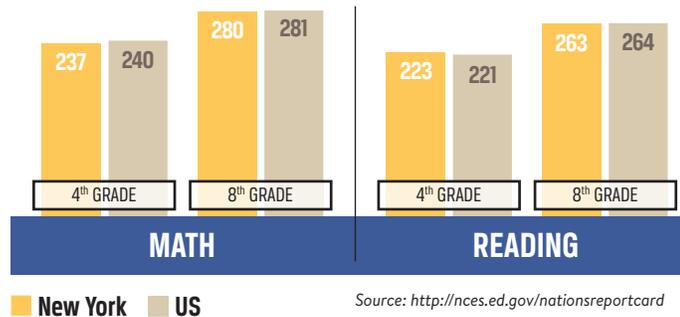
- What Works Clearinghouse:
<http://ies.ed.gov/ncee/wwc/findwhatworks.aspx>
- Education Resources Information Center:
<http://eric.ed.gov>

Average Spending Per Student on Education



Source: Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015): First Look (NCES 2018-301)

New York Performance on the 2015 National Assessment of Educational Progress



Source: <http://nces.ed.gov/nationsreportcard>

New York IES Grants

