

# 1231 Seience

# Accessible, Affordable In-School Research Projects for All

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Science Outreach Program (RockEdu) Mission: To provide inclusive, authentic, and supportive biomedical learning and research opportunities to all members of the K-12 community in a way that is dynamic and engaging, while keeping in mind cultural and social contexts.

#### EQUITABLE ACCESS

ensuring all groups are provided with equal opportunities for STEM enrichment & employment

#### INCLUSION

a process that encourages collaboration, flexibility, and fairness, and allows all students to participate to their fullest potential

#### DIVERSITY

an inclusive cultivation of scientific talent by promoting scientific excellence across the entire social identity spectrum

RockEdu's newest work towards these goals: Launching our Digital Initiative

### Teacher Resources

- Broad frameworks to shape how we think about certain concepts and topics
- Accurate, in-depth **background** reading materials
- Sample demos Talking science and classroom activities 10 \* EB) # 33/1/ 406 78 48 # 1





Proposed Implementation

of 1230 Science:

Science Saturday

#### 1230 Science

Affordable, accessible school-based research projects for students to authentically engage with the research process

- Background information and literature for each model system presented at a high school level
- Flexible protocols and multimedia resources to successfully initiate and maintain a project system using everyday materials & a small budget
- Guidance on question development and project planning; templates for sharing results and discoveries
- Multimedia connections to scientists studying relevant fields

Framework repeated yearly for-

each new Research Model

## [Social Media]

- To **humanize** and contextualize science while highlighting diversity
- Scientists of New York #**sciony** Facebook, Twitter, Instagram #RockEdu Parts per Millions #ppms

Proposed Goals & Metrics of 1230 Science:

> **Network of** scientists and teachers interested in creating and testing primary research experiences

Tracking teachers involved in implementation:

- Through what partner organizations?
- From what schools?
- Participating in which phase(s) of development?
- What individual teachers want out of the partnership?
- Is this project/will this project address teachers needs?

Authentic model systems that will be affordable and accessible to diverse populations

Define and assess metrics

- of the model systems in terms of:
- Affordability
- Accessibility

Reaching a wider base of underrepresented students and increase participation in, appreciation for, and understanding of science

#### **Tracking student** participation and impact

- Demographics of student participants
- Demographics of teachers and schools affiliated
- Affordability & accessibility of model implemented
- Outcomes of performing research

How do we truly measure effectiveness in terms of... ...inclusion and diversity? ... authenticity? ... value to students?

Through science outreach we aim to instill a passion for learning STEM through equitable opportunities that promote diversity and inclusion for ALL students.





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