



VIII GeoSciEd 2018 – 8th Quadrennial Conference of the International Geoscience Education Organisation (IGEO)

– Geosciences for Everyone –

VIII Simpósio Nacional de Ensino e História de Ciências da Terra / EnsinoGEO-2018

– Geociências para Todos –

Campinas – Sao Paulo – Brazil, July 2018



EnsinoGEO
2018

How Museums, Teacher Educators, and Schools Innovate and Collaborate to Learn and Teach Geosciences to Everyone

COMO MUSEUS, PROGRAMAS PARA EDUCADORES E ESCOLAS FAZEM INOVAÇÕES E COLABORAM PARA APRENDER E ENSINAR GEOSCIÊNCIAS A TODOS



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AMERICAN MUSEUM
OF NATURAL HISTORY

MARITZA MACDONALD, DAVID SILVERNAIL, NATASHA COOKE-NIEVES,
SHARON LOCKE, ALINE GJELAJ, NAKITA VAN BIENE, MICHAEL J. PASSOW

**PURPOSE: INTRODUCING MUSEUMS AS SITES FOR PRE-SERVICE
TEACHER EDUCATION & PREPARATION**



What is the AMNH-MAT program?

O que é o programa AMNH-MAT?

- Enrolls ~ 15 students per year in only museum-based urban teacher residency (UTR) program in the world
 - Degree in a field of geosciences, high GPA, strong references, passion for teaching, learning, and Earth Science
 - 4 year commitment to teaching in high-needs schools in NYS
- 15 month, 36 credit Masters in Teaching Residency Program
 - Masters of Arts in Teaching Earth Science, grades 7-12
- 2 years of post-program professional support (“Induction”)



Program Design

Estrutura do Programa

1st Summer	Fall	Spring	2nd Summer	Induction (post-graduation)
Museum Teaching Residency	School Residency	School Residency	Science Practicum Residency	Classroom Observations
Courses in Science and Pedagogy			Induction Orientation	Professional Development
Co-Teaching with Mentors, Academic Advising, e-Portfolio				Mentoring on-site, in schools, online

Summer 1: Informal Learning, Teaching, & Researching at the Museum

Verão 1: Aprendizagem informal em Museus





Partner Residency Schools



Midwood High School



Roosevelt High School



Bronx Early College Academy



Hunter's Point Community Middle School

Academic Residencies *Residências Acadêmicas*





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Museum Science Investigations

Investigações Científicas do Museu





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Summer 2: Research Practicum

Verão 2: Estágio em Pesquisa





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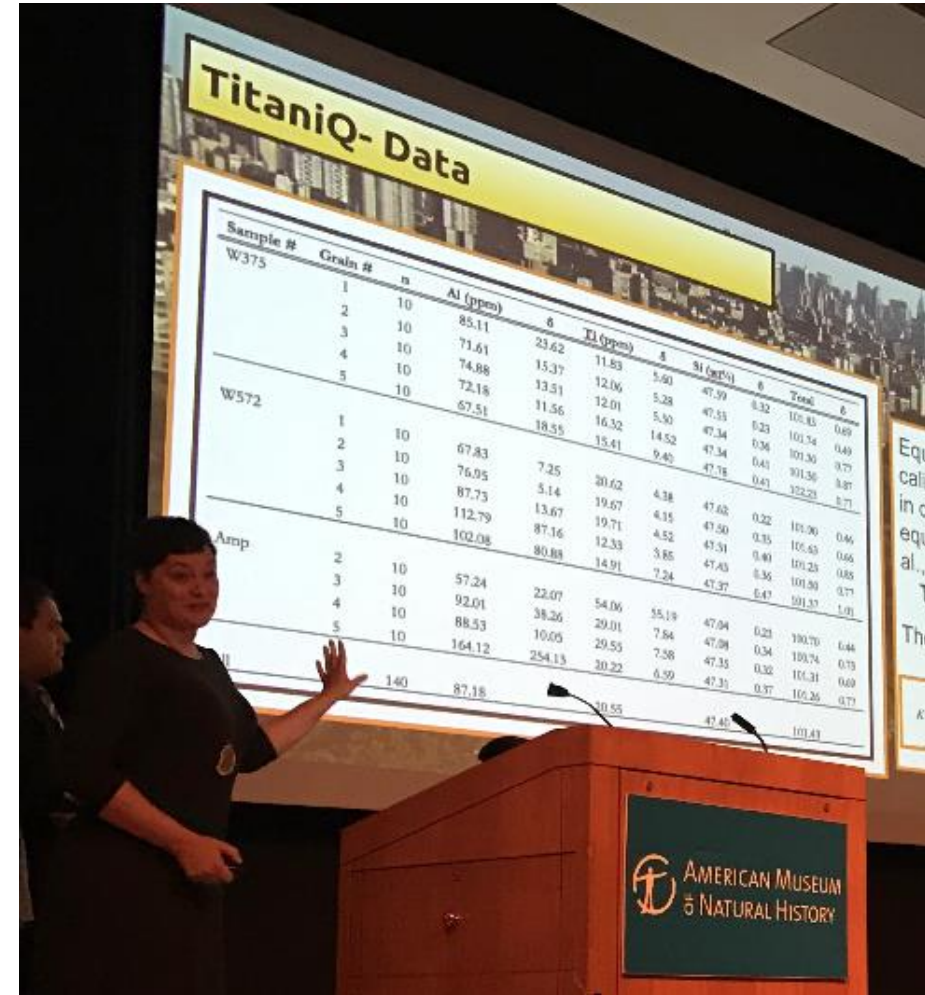
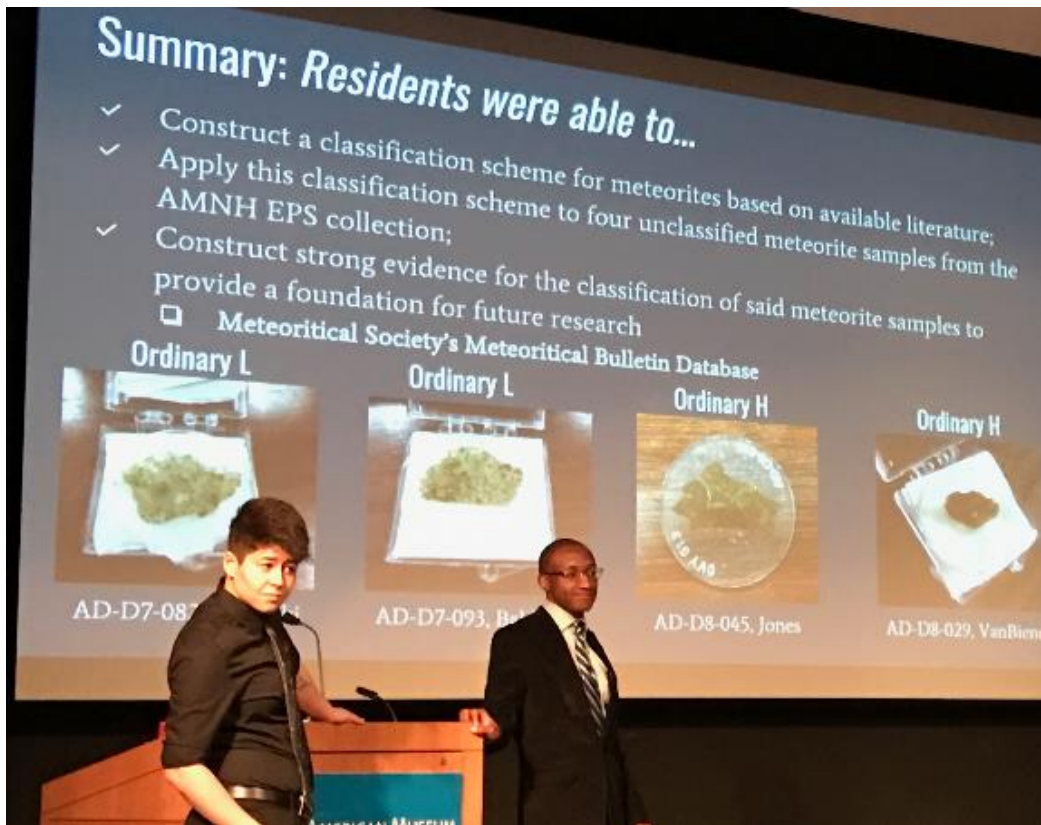
Summer 2: Research Practicum

Verão 2: Estágio em Pesquisa



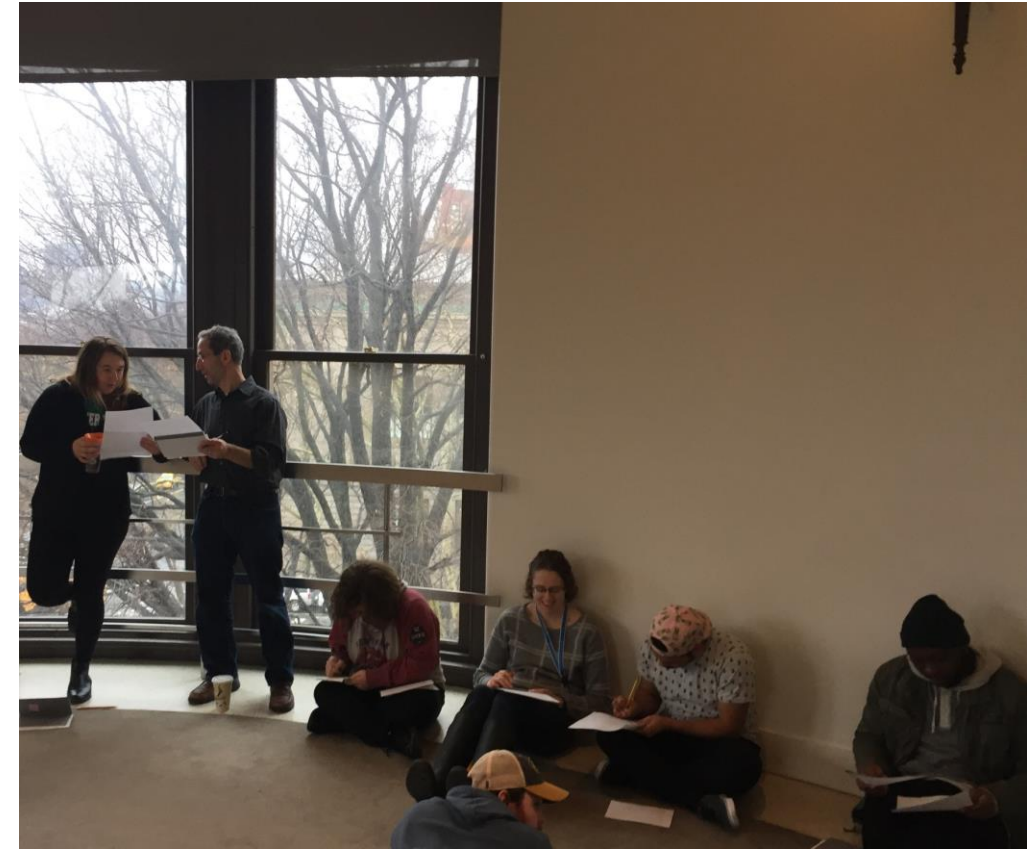
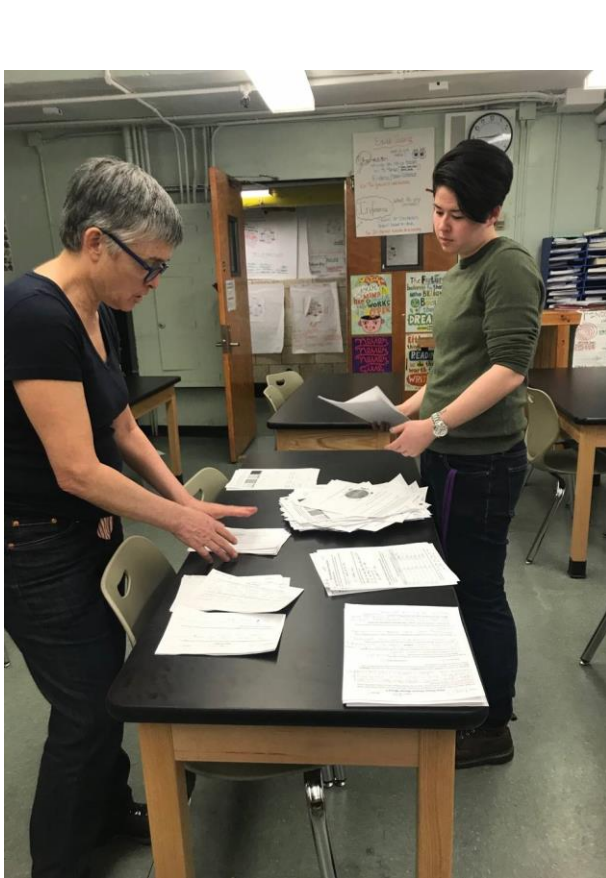
Summer 2: Research Practicum

Verão 2: Estágio em Pesquisa



Induction

Indução





Conclusions and Applications

Conclusões e Aplicação



- 7th year of program
 - 89% graduation rate
 - 100% success rate for graduates receiving NYS teaching certification
 - 100% employment rate post-graduation
 - **Course efficacy rated high**
- ~8,400 NYS students are taught by graduates
 - 46% of graduates are working in Brooklyn or the Bronx, districts serving most economically disadvantaged in NYS and the US
 - Achievement is equal or greater



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Thank you!

Obrigada!

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QUESTIONS?



PERGUNTAS?



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