

Sanford Underground Research Facility Envisioning Equitable STEM Learning

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Sanford Underground Research Facility (SURF)

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Deb Wolf – Director of Education, Public Relations, and the IDEA Office

Experience includes over 30 years serving K-12 education:

- K-12 classroom teacher, instructional coach, building admin.
- State level – SD Dept of Education – Education Innovationist
- Professional development facilitator

2018 – Director for Education & Outreach at SURF (via BHSU)

2021 – New role – education, communications, IDEA

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Every student deserves high-quality, engaging, relevant, equitable and rigorous science learning opportunities.

South Dakota Education Landscape





Education of K-12 Students

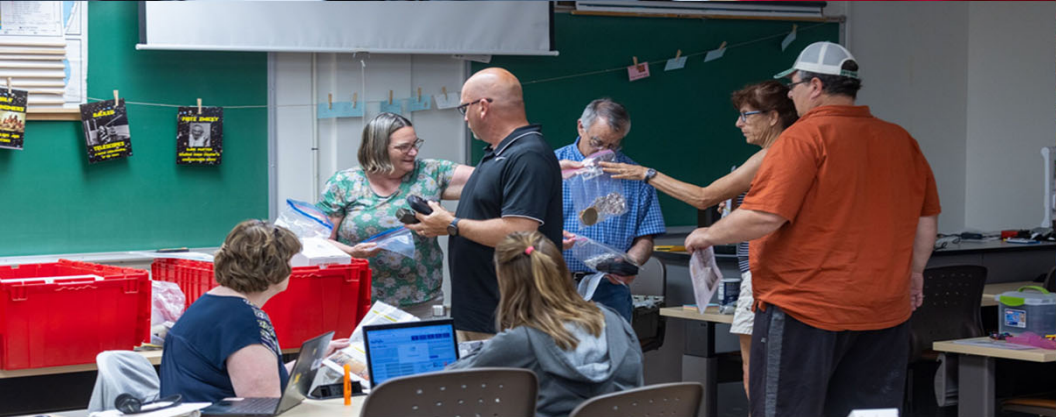
60,000 students since 2016

- Field Trips
- Classroom Presentations
- Curriculum Units

Everything a teacher needs in one box



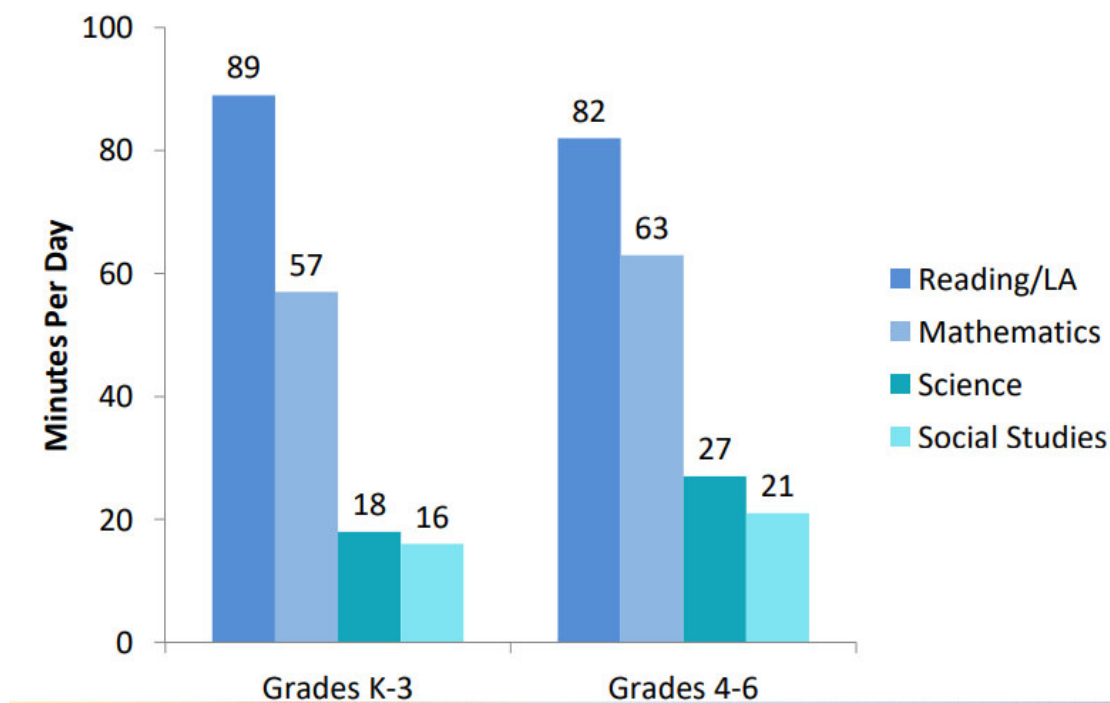
Supporting Educators & Future Educators



What have we learned, where are we going, what do we need?

Elementary science learning opportunities are few, they are a function of the system, and they need to increase!

Instructional Time: Elementary



NSSME

THE NATIONAL SURVEY OF
SCIENCE & MATHEMATICS EDUCATION

horizon
RESEARCH, INC.

What have we learned, where are we going, what do we need?

Educator confidence – especially science in elementary and areas of unsettled science – is low and capacity needs to be built.



What have we learned, where are we going, what do we need?

The unsettled science at SURF is compelling, relevant, and can provide inspiration for SD science educators and students.



What have we learned, where are we going, what do we need?

Place-based, justice-centered science that reinforces students' identity is critical.



What have we learned and where are we going?

This work is complex, it
is context-dependent, it
requires all of us, and it
matters!

A night sky photograph with a starry background and a building illuminated at the bottom. The sky is dark with many stars, and the Milky Way is visible. The building is a white, multi-story structure with a clock tower, illuminated from below. The foreground shows dark silhouettes of trees and a dark landscape.

Thank you

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