Incorporate diversity, equity, and inclusion teaching in the classroom and identify gaps in available resources.

Project EDDIE is a suite of large datasets and teaching quantitative reasoning. Community contributions related to teaching quantitative reasoning with large datasets from across environmental science-related disciplines, institution types, and classroom settings.

What is the Community Saying?

Instructors and data providers identified key elements of EDDIE modules: needs associated with teaching quantitative reasoning with data.

Outcomes are directly informing the module design, resources, and professional development programming and will continue to inform new opportunities for educators.

What elements do participants perceive as critical elements of EDDIE modules?

Participants in the June 2019 Teaching Quantitative Reasoning workshop identified benefits, strategies, challenges, and needs associated with teaching quantitative reasoning with data.

1. Multiple benefits of teaching with data: quantitative reasoning, student engagement, student skillset, and scientific literacy
2. Effective course structures and strategies include building student confidence, matching student outcomes with evidenced-based pedagogy, and building faculty confidence and ability
3. Challenges to teaching quantitative reasoning include uneven student preparedness, variations in computing platforms, and balancing learning outcomes against qualitative reasoning, data processing, and scientific content
4. Needs for pedagogical tools and include resources such as scaffolding for instructors, strategies for teaching quantitative reasoning with technology, approaches for evaluating student learning
5. Informing Community Resources, Instructor Adoption Materials, Professional Development programming
6. Needs to teach quantitative reasoning with data in the classroom and identifying gaps in available resources.

Instructor Support

Project EDDIE is partnering with QBES to bring together faculty interested in implementing existing EDDIE modules to address quantitative reasoning and scientific concepts using large datasets.

FAQ

- What is EDDIE?
- Advantages of EDDIE modules
- What is quantitative reasoning (QR)?
- How to do the workshop?
- How to adapt modules?
- In the classroom
- Before class
- During class
- After class

Contact Us!

Serach the EDDIE website (http://serc.carleton.edu/eddie) for more information.

Project EDDIE: Supporting Teaching Quantitative Reasoning Using Large Data Sets

Andrew Haveles1*, Ellen Altermatt2, Susan Eriksson2, Kristin O’Connell2, Ellen Iversen2, Dax Soule3, Cailin Orr3, Catherine O’Reilly3

1Carleton College, 2Eriksson Associates, 3Queens College - CUNY, 4Illinois State University

*arhaveles@carleton.edu

Instructor stories, module development and adoption of EDDIE modules, conference presentations, and new material and project updates.

Browse Project EDDIE (webinars, workshops, FMN), Join the EDDIE Community to keep up with the latest opportunities (webinars, workshops, FMN), new material and project updates.

Get Involved

Fostering Adoption

The module development process and FMN will include documenting community-derived ideas, strategies, and implementation materials.

• Instructor Stories
• Instructor adoption on-ramps

Project EDDIE will be recruiting workshop participants at professional conferences (e.g., ESA, ASLO, GSA, AGU, GLEON) starting late 2020.

Material Development

Module Development Rubric

• Module developers will adhere to a design rubric that during module design, piloting, and reviews
• The rubric was informed by existing EDDIE modules, community input, and other community-driven rubric models (e.g., InTeGrate, GETSI, GeoPRISMS).

Instructor adaption on-ramps to EDDIE modules will provide a structured pathway for instructors.

Statistical Vignettes

• Designed to address quantitative concepts as a Just in Time Teaching resource
• Designed to be used independently or in combination with an EDDIE module
• Storylines will be developed specifically to include flexibility and breadth of materials and case studies.

Topics based on the Community Needs input and the current module design process.

Publicly Available Datasets

Community sourced collection of publicly available data sources that span environmental related disciplines.

New EDDIE Modules

Module development workshops will focus on participants designing flexible EDDIE teaching modules that pair scientific concepts and quantitative reasoning with teaching with data.

Workshop Synthesis

Essays Teaching Activities

Past webinar topics

• Developing and implementing EDDIE Teaching Modules Using High Frequency Datasets to Address Scientific Concepts and Quantitative Reasoning Skills
• How to Adapt EDDIE Modules to Meet Student’s Needs
• Using Time Series Data in the Classroom
• Developing students’ quantitative reasoning abilities using large datasets

Webinars

Topics focus around the topics of teaching quantitative reasoning and teaching with large datasets.

Past webinars were recorded and future webinars will address:

• Module adoption and adoption of teaching materials for your course scenario
• Instructor Professional Development for teaching quantitative reasoning and teaching with data

Community Needs

Webinars

Marketplace

Financial Support

Developing Material

Design Rubric

Statistical Vignettes

Adoption and Use

Workshops Workbooks Faculty Mentoring Material Testing

Instructor Support

Serach the EDDIE website (http://serc.carleton.edu/eddie) for more information.

If you are interested in any Project EDDIE Opportunities Contact Us! (https://serc.carleton.edu/217908)

Instructor Support

Fostering Adoption

The module development process and FMN will include documenting community-derived ideas, strategies, and implementation materials.

• Instructor Stories
• Instructor adoption on-ramps

Project EDDIE will be recruiting workshop participants at professional conferences (e.g., ESA, ASLO, GSA, AGU, GLEON) starting late 2020.

Get Involved

Join the EDDIE Community to keep up with the latest opportunities (webinars, workshops, FMN), new material and project updates.

Browse Project EDDIE (webinars, workshops, FMN), Join the EDDIE Community to keep up with the latest opportunities (webinars, workshops, FMN), new material and project updates.

Get Involved

Join the EDDIE Community to keep up with the latest opportunities (webinars, workshops, FMN), new material and project updates.

Browse Project EDDIE (webinars, workshops, FMN)