Earth Systems Roundtable: KU-CESE



Department of Geology & Meteorology

Components - ESR

- Content & Context (experiential learning)
- Life Systems (biosphere motivation)
- Lesson Plans & Activities Developed
- Resources & Sources Identification
- Pedagogy & "Across the Curriculum"
- Assessment & Outcome Metrics

Intent: A series of brief workshops and working group events during the year for teachers, partners, and other participants to explore and develop earth systems science teaching and learning through the ESR Components listed above. Each year focuses on a different theme relevant to the geosphere (e.g., weather & climate; stars & space; rocks & minerals; water & ice; et cetera).

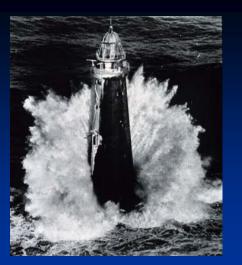
Create
Revise
Implement
Outcomes



ESR Delivery...

- Workshops/Events 4 to 6 per year
- Annual theme topics as focus
- Speakers, Panels, and Working Groups mixture
- Demonstrations and Methods instruction
- Tangibles for the classroom (take-home, plug-in)
- Focused topic but open discussion, limited time
- Weekday afternoon/evening or Saturday

Earth Systems Collective Community



For example...

Theme: Weather & Climate

- January ##: Content & Context
 - Audience = teachers, partners, others
 - Topic focus = e.g., winter weather conditions and hazards in new jersey and how el nino is related (or not)
 - Approaches = guest speaker, online sources, analogs and illustrations for classroom use
- March ##: Application & Constructivism
 - Audience = teachers
 - Topic focus = e.g., tornado season and severe weather in the United States as compared to new jersey
 - Approaches = video, discussion, emergency management, online resources



...continued

Theme: Weather & Climate

- May ##: Lesson Planning
 - Audience = teachers
 - Topic focus = selected by group
 - Approaches = science standards
- July ##: Methods, Set-up & Testing
 - Audience = teachers, partners, others
 - Topic focus = selected by group
 - Approaches = best practices, support

Who are the...

Partners?

Others?

Audience?

- September ##: Pedagogy & Across the Curriculum
 - Audience = teachers
 - Topic focus = selected by group
 - Approaches = methods and linkage of subjects
- November ##: Assessment & "Townhall" Meeting
 - Audience = teachers, partners, others
 - Topic focus = selected by group
 - Approaches = implementation and evaluation





- NJESTA
- KU (Epsilon Corps, CAMS, others possible)
- MISE, Museums
- Laboratories
- Media Groups
- Military/Defense
- State/Local Agencies
- Red Cross and similar groups
- Emergency Services
- Many possibilities...

Comprehensive Development/Help

- Content knowledge providers
- Connection for motivation with biosphere
- Tangibles for use in both lesson planning and delivery
- Learning of the pedagogy and methods/demos
- Outcomes/Assessments

Support Group

- Self-determining
- Self-sustaining
- Interactions among groups
- Best practices shared
- Community of stakeholders

Resources

Content

Methods

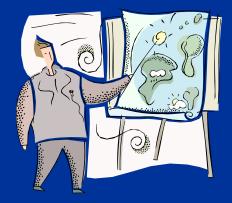


Earth Systems Roundtable

Making effective & coordinated use of our community's combined abilities

Now it's your turn...

- Comments, Questions, Suggestions?
- Interested?
- Contact?



cese@kean.edu

1-908-737-3690

