

Review Criteria: Modules

Note to reviewers: please read through the entire module in order to complete the review, focusing on the module as a whole and not on particular details. Please compose careful annotations.

Definition of module:

A module is a self-contained series of several coherent activities (or units) within a curriculum. A module covers a single topic or a small section of a broader topic, studied over multiple sessions. Several modules may be combined to make up a curriculum. A curriculum then sequences the modules to make a blueprint for learning, direct teaching, organize content and align performance standards (after Wiggins & McTighe, 1998).

Reviewers: Please note that for CLEAN purposes, the time it takes to complete a module should be in the 1 week – 6 weeks range; if it take more time than that, it should be deferred to the holding tank.

Scientific Quality

1) Is an attribution provided that represents a credible source such as a university or government agency?

- yes
- no

2) Does the module as a whole support an understanding of the scientific process?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

3) Are students working with real scientific data in the module?

Yes

No

4) Are links to original background information and data sources provided throughout the module?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no
- not applicable

5) Are references, bibliographies and other supporting material provided in the module?

- yes
- no

Science Annotation - please include strengths and concerns (content to be used for catalog record):

Overall Rating of Scientific Quality

- Presentation of scientific content and scientific process meets highest standards
- Presentation of scientific content and scientific process has minor shortcomings
- Presentation of scientific content and scientific process has major shortcomings
- Can't answer this

Pedagogic effectiveness

1) Is there an overarching design to the module (such as learning goals being linked to articulated big ideas, learning activities, and assessments, etc.)?

Yes

No

2) Are student learning goals for the module clearly articulated?

- yes
- no

3) Does the design of the module build toward mastering the learning goals?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

4) Does the module involve students in a logical or strategic sequence of lessons or activities (versus being just a collection of loosely-related lessons or activities)?

Yes

No

5) Does the module address a mix of learning styles?

Yes

No

6) Is the module as a whole designed for effective use by underserved and/or culturally diverse learners?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

7) Are students engaged in inquiry, independent thinking or problem solving in the majority of the module?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

8) Are a variety of grade- appropriate assessments included that meet the diverse needs and learning styles of students?

- 4 Definitely
- 3 Somewhat
- 2 A little
- 1 No

9) Do assessment questions reflect higher level thinking skills?

- Yes
- No

10) Do the embedded visuals enhance student understanding of the activities in the module?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

11) Does the module provide vehicles for asking questions or seeking further information?

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

Pedagogy Annotation - please include strengths and concerns (content to be used for catalog record):

Overall Rating of Pedagogic Effectiveness

- Module design is pedagogically effective and suitable for the target audience
- Module design is pedagogically good but has minor shortcomings
- Module design has considerable shortcomings
- Poor module design
- Can't answer this

Ease of use

1) Is the module free of distracting or off-topic advertising?

- yes
- no

2) Is the module complete in scope and ready for use?

- yes
- no

3) Are materials lists provided, where appropriate, throughout the module?

- yes
- no
- not applicable

4) List any software/downloads -- and associated costs, if any -- required to complete the module (content will be used for catalog record):

5) Does the module provide clear and comprehensive guidance for teachers? (such as background information, clear instructions for conducting each activity, assessment rubrics, supplementary resources, etc.)

- 4 definitely
- 3 somewhat
- 2 a little
- 1 no

Annotation about Ease of Use - please include strengths and concerns (content to be used for catalog record):

Overall Rating of Ease of Use

- Easy and intuitive to use for students and teachers, grade-level appropriate design
- Fairly easy to use for students and teachers
- Careful guidance of students through material needed
- Easy to get lost in material, counter-intuitive and/or not grade-level-appropriate
- Can't answer this

Overall Rating of Technical Quality

Please rate the technical quality of the module – assuming its use in a typical classroom environment

- Technically robust and adequate for use in typical educational environment
- Technically good, but requires tech support that may not be available in typical educational environment
- Technically weak, minor problems when used in typical educational environment
- Technically weak, major problems when used in typical educational environment
- Can't answer this

Annotation about Technical Quality – please include strengths and concerns (content to be used for catalog record):

Teaching Tips

1) Teaching Tips (content will be used for catalog record):

2) Amount of time required to complete this module (content will be used for catalog record – for example: 5-10 45 minute classes)

4) If the module is part of a larger collection and there is a relevant parent URL please copy the URL here (format [URL]- content will be used for catalog record):

5) Does the module have a distinct regional focus?

- no regional focus**
- Islands and Territories** (Hawaii, Puerto Rico, US Virgin Islands)
- Northwest** (Washington, Oregon, Idaho, (Western) Montana)
- Southwest** (California, Nevada, Utah, Arizona, New Mexico, (Western) Texas, (Southwest) Colorado)
- Great Plains** (Eastern) New Mexico, Texas, Oklahoma, Kansas, Nebraska, Wyoming, Montana, South Dakota, North Dakota)
- Midwest** (Minnesota, Michigan, Wisconsin, Iowa, Missouri, Illinois, Indiana, Ohio)
Great Lakes (Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New York)
- Southeast** (Southeast) Texas, Arkansas, Louisiana, Mississippi, Kentucky, Tennessee, Georgia, South Carolina, North Carolina, Virginia, Alabama, Florida)
- Northeast** (West Virginia, Maryland, Washington D.C., Maine, Vermont, New Hampshire, New York, Pennsylvania, Connecticut, Rhode Island, New Jersey, Delaware, Massachusetts)
- Coasts** (Maine, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Louisiana, Mississippi, Texas, California, Washington, Oregon, Alaska)
- Alaska**

Please specify the state(s):

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Essential Principles of Climate and Energy Literacy

Select the primary Principles that are addressed by the module.

- GP Humans can take actions to reduce climate change and its impacts.**
- 1 The Sun is the primary source of energy for Earth's climate system**
- 2 Climate is regulated by complex interactions among components of the Earth system**
- 3 Life on Earth depends on, is shaped by, and affects climate**
- 4 Climate varies over space and time through both natural and man-made processes**
- 5 Our understanding of the climate system is improved through observations, theoretical studies, and modeling**
- 6 Human activities are impacting the climate system**
- 7 Climate change will have consequences for the Earth system and human lives**
- Energy Literacy**

Audience Level

Please select the grade level for which this module is most appropriate (in your judgment) Check all that apply.

- Primary (K-2) (note that this grade range is out of scope for CLEAN)
- Intermediate (3-5) (note that this grade range is out of scope for CLEAN)
- Middle (6-8)
- High School (9-12)
- College Lower (13-14)

- College Upper (15-16)
- Graduate or Professional
- Informal Education (museums, park displays)

Grade level notes (content will be used for catalog record):

Creator (Last name, First name or the organization. semicolons to separate multiple entries. If creator is an organization with commas in the name put it in the publisher field instead.)

Publisher (Not same as creator, use for organization)

When was the webpage of the module last updated? (Specify date if available and if necessary add comment)

Overall Rating of Relevance to CLEAN

- High Priority (Resource likely to be included in CLEAN collection of excellent resources)
- Medium Priority (Resource meets basic CLEAN standards)
- Low Priority (Resource meets basic CLEAN standards but is of lower priority)
- Hold for Later Review (Keep in pool for another review at later stage)
- Excellent but Incomplete (Excellent and relevant but needs improved activity sheet)
- Do Not Include (Resource doesn't meet basic CLEAN standards)
- Review in process (not yet complete)
- Unvetted (Review not yet complete)

Other Reviewer Comments (for internal use only - not used for catalog record)