

Expert Review Formative Evaluation of an NSTA Science Module

Thank you for agreeing to serve an expert content reviewer for this Key Idea as part of an NSTA Science Module: (title of science module). Your expertise and critical review will help to ensure that our science objects will be accurate, current and of sufficient depth to cover the topics at hand. Your objective is to complete the questions asked in this document and use the feedback buttons within the Evolution tool to comment on each section of content on the Key Idea being reviewed. Return it to NSTA after reading the content contained in the attachment (title of science module).

This expert review will collect your comments in the following critical areas of the content:

1. Content accuracy
2. Content completeness for the topic at hand (quality, clarity, addresses misconceptions)
3. Content currency and realism
4. Assessment appropriateness (embedded assessments are within the content you'll be reviewing)

Overall Purpose of Content Expert Review:

Formative “Expert Review” evaluations are conducted to collect data and information used to *improve* the instructional effectiveness of a product and to determine the instruction’s strengths and weaknesses. An expert review is conducted before the product is completed or finalized and analyzes various components as well as implementation concerns, depending on which expert is conducting the review (instructional designer, content matter expert, technology expert, etc.). We hope you will be able to help us identify glaring mistakes in the science content, provide overall concerns regarding the science content accuracy, and recommend general areas for improvement in this regard. Ultimately you’ll create assist NSTA in creating a “to do” list in revising the instruction.

What is a Science Content Module?

Science content modules are online chunks of learning that help educators learn core science content tied to the Atlas of Scientific Literacy (Benchmarks). Each Science Content Module will be comprised of individual Key Ideas We have attached an abbreviated K-12 strand Scope Document this science content module is supposed to cover. The Scope Document will succinctly identify all the Key Ideas that will be comprise the Science Content Module, and the “Evidences of Learner Understanding” that will demonstrate comprehension for each Key Idea. The Key Ideas are chunks of content that are self-paced, and drill down in to facilitate learner understanding through the use of online simulations, easy-to-recreate hands-on activities, and moderated discussion with other educator colleagues (as related to pedagogical implications only). Subject matter experts are available via an email link for targeted content related questions.

In addition to just-in-time learning, where the learner can control the place, pace and time of learning, science content modules will address common misconceptions related to the content at

hand, and allow educators to assess their understanding of a concept by engaging in the science module quizzes after each key idea in the module. NSTA will provide certification upon completion of the science content module and through both a final post assessment. A typical science content module may take anywhere from 4- 14 hours to complete if consumed in a continuous fashion.

Steps to complete the review:

1. Read the Scope document titled: _____ to get the “big picture” overview of what Key Ideas, Evidences of Understanding the hopes to achieve.
2. Read the Design document titled: _____ while answering the questions below.
3. Read the storyboard titled: _____ and provide a critique of the content. The storyboard shows screen snapshots of the content and how it will be sequenced on the page.
4. Please review the embedded quiz and final assessment items for content accuracy as well.

Questions:

Document being reviewed: (Document Step 2).

Content Accuracy		
The content is accurate (all information is correct). Information presented is reliable, valid and authoritative. Facts should be impartially presented and sources cited where applicable. Sources of information are stated and the information is verifiable. Watch out for bias.	Yes	No
Comments:		

Content Completeness		
The content is complete. No important information is missing that is crucial to the topic being discussed given your review of the Atlas strand. The content presented is clear, concise, and addresses misconceptions related for the topic.	Yes	No
Comments:		

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Content Currency		
The content is up-to-date (no information referenced in the science object is outdated. Currency issues should not be an issue for objects like Newton's second law, but if the author references current trends or topics like genetics, currency will be important).	Yes	No
Comments: If errors exist, please identify where and provide recommendations for correcting the dated material.		

Accuracy of Assessment Items		
The assessment items (both embedded and pre/post items) are accurate, with correct answers clearly presented, and feedback answers properly addressing errors identified.	Yes	No
Comments:		

Overall Attitude Regarding Science Object				
Please provide us with your overall rating of your perceived effectiveness of this science object.	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The content would assist an educator in learning the desired outcomes				
2. The content is motivational for the adult educator				
Overall Comments/Impressions:				

