

Gifted Lesson Review Supplemental Checklist

Science

These criteria may be used to assess lessons and units designed for gifted learners based on the Ohio New Learning Standards. This list is meant as a supplement to Ohio's Quality Review Rubrics for lessons and units published by the Ohio Department of Education, not as a replacement. The criteria below have been developed based on Sandra Kaplan's work with depth and complexity. A lesson for gifted learners would include one or more elements from the list below; however, it is not expected that any single lesson would include all of the elements.

Alignment to the Rigors of Ohio's NLS

- Is connected to a broad, interdisciplinary theme or essential question.

Key Shifts in Ohio's NLS

Instructional Supports

- Prompts students to prioritize information, distinguish between relevant versus irrelevant information, uncover bias, and determine the author's purpose and credibility for including specific elements within scientific text.
- Texts include sophisticated vocabulary such as terminology utilized by specialists within broad and specific scientific disciplines.
- Prompts students to question assumptions, ambiguities, incomplete or contradictory information, and fallacies, and to create and implement a plan to search for answers to their questions.
- Includes opportunities to utilize textual, pictorial, or other observed details to describe, compare and contrast, or prove with evidence.
- Based on prior knowledge and new information, students are expected to identify trends, formulate new questions, and predict future events.
- Provides opportunities for students to analyze the cause and effect of manipulating variables, factors, or other elements of a given problem and to recognize any patterns or rules that emerge.
- Requires students to analyze the origins and contributing influences of scientific ideas and theories that have led to their development over time.
- Provides opportunities for students to evaluate and debate problems and solutions, ethical dilemmas, or controversies utilizing a set of existing or student-generated criteria and supported by evidence.
- Analyzes the application and contribution of scientific knowledge to other disciplines and discusses the resulting trends from multiple points of view.
- Based on prior knowledge and new information, students are expected to find parallels between science content and skills and understandings in other disciplines.

- Requires inductive reasoning to develop overarching thematic statements and generalizations that can be supported with evidence across the disciplines.

Assessment

- Is designed with sufficient stretch to allow for documentation of new learning rather than repetitive demonstration of prior knowledge.
- Utilizes assessment data to determine opportunities for curriculum compacting and/or acceleration.