

Improving K–12 Science Instruction Through Professional Development in Project-Based Learning

Project-Based Lesson Plan Evaluation Rubric

Note. This rubric is used to evaluate participants' final lesson plan submissions. Scores provide evidence of participants' ability to design NGSS-aligned, inquiry-based, and differentiated project-based science lessons following completion of the professional development intervention.

Criteria	1 Beginning	2 Developing	3 Proficient	4 Exemplary
NGSS Alignment	Minimal alignment	Partial alignment	Clear alignment	Strong integration of NGSS practices and standards
Project-Based Learning Components	Limited project elements	Some project elements	Clear project-based design	Authentic real-world project fully integrated
Inquiry-Based Instruction	Teacher-directed activities	Limited inquiry opportunities	Student inquiry included	Extensive student-driven inquiry
Differentiation Strategies	No differentiation evident	Limited supports included	Appropriate accommodations included	Multiple pathways for diverse learners
Scientific Vocabulary Integration	Minimal vocabulary use	Some vocabulary included	Appropriate vocabulary integration	Vocabulary explicitly taught and reinforced
Assessment Plan	Limited assessment evidence	Basic assessment included	Clear assessment strategy	Multiple assessments aligned to learning goals

Scoring Guide:

- 21–24 = Exemplary Implementation
- 16–20 = Proficient Implementation
- 11–15 = Developing Implementation
- 6–10 = Beginning Implementation