

3D Phenomenon-Based Lesson

In conjunction with your field placement experience, you will plan and implement a 3D Phenomenon-Based lesson. As part of this lesson, you will select a phenomenon connected to a disciplinary core idea (DCI) to explore by using the Science and Engineering Practices (SEPs) with an explicit connection to a Crosscutting Concept (CCC).

The selected phenomenon should be engaging, appropriate, and clearly connected to a DCI. During the implementation of the lesson, you should be facilitating the lesson and supporting students in understanding the phenomenon and DCI by engaging in the SEPs. You should also incorporate an explicit connection a CCC and use it as a lens to understand the phenomenon and DCI. You should create a 3D Map for the planning of the lesson:

https://docs.google.com/presentation/d/1C0g5a82DE7_UCTL9ma8Q3EmY5Ppr-pMaNrmFZeCn8NA/edit?usp=sharing

The lesson plan should also be scripted so anyone could pick it up and easily implement the lesson even if they did not understand the content.

The lesson will be assessed using the rubric below.

Lesson Component	NSTA Standard	Does not fully meet requirements (1)	Developing (2)	Proficient (3)
Grounding Phenomenon	2a	States a phenomenon.	States a specific phenomenon that is appropriate for the content.	States a specific phenomenon that is engaging and appropriate for the content. The phenomenon is used to understand the content.
Conceptual Goals & Learning Objectives	1c	States specific goals and objectives in some format.	States specific conceptual goals and content and process learning objectives derived from state and national standards.	States specific conceptual goals and content and process learning objectives derived from state and national standards and restated in the students' own words.
Use of SEPs	1b	SEPs are used in the lesson.	SEPs are used to understand the DCI and connects to the CCCs.	SEPs are purposely used to understand the phenomenon and DCI and explicitly connects to the CCCs.
Use of DCIs	1b	DCI is selected for the lesson.	DCI is selected for the lesson and connects the SEPs and CCCs.	DCI is selected for the lesson and explicitly

				connects to the SEPs and CCCs.
Use of CCCs	1b	CCC(s) selected for the lesson.	CCC(s) selected for the lesson and connects the SEPs and DCIs.	CCC(s) selected for the lesson and explicitly connects the SEPs and DCIs.
Scripting of Lesson	1c	Contains an outline of the lesson and schedule of activities with timeline.	Includes some scripting of the lesson and a timeline of activities containing student expectations, planned questions, plan to ensure participation, and respectful tasks.	Includes a detailed scripting of the lesson and timeline of activities containing student expectations, planned questions, plan to ensure participation, and respectful tasks.
Assessment	2d	Includes some form of assessment of student learning.	Uses at least two assessments throughout the lesson.	Includes at least two assessments. Uses formative assessment throughout.
Safety Considerations	4a	Includes safety considerations specific to lesson, if any.	Includes physical or emotional safety considerations for any classroom or lesson.	Includes both physical and emotional safety considerations for any classroom or lesson.
Supporting Materials	2a	Contains a list of all critical equipment and materials that will be handed out to students.	Contains a detailed description of all equipment. Includes links to all materials (handouts, assessments, instructions) that will be distributed to students.	Contains a detailed description of all equipment. Includes links to all material (handouts, assessments, instructions) that will be distributed to students and notes on when/how materials will be used, as well as any ancillary materials.
References & Resources	2a	Includes a list of links of references and resources.	Includes a descriptive list of references and resources.	Includes an exhaustive and descriptive list of references and resources.