



		Content	Activity
Section 1	Introduction	Review of Learning Objectives and handouts	Handout: Agenda, and DLM science Framework Reference Sheet
Section 2	The DLM Science Essential Elements (EEs) and Framework	Overview of the framework and connection to DLM science EEs	Group Discussion
	Framework Dimension 1: Disciplinary Core Ideas	Overview of the disciplinary core ideas and the connection to DLM Science EEs	
	Framework Dimension 2: Science and Engineering Practices	Overview of each science and engineering practice and the connection to science EEs	
	Framework Dimension 3: Crosscutting Concepts	Overview of crosscutting concepts	
Section 3	Wrap Up	Closing information	Handout: Post Learner Assessment

This guide describes the workshop preparation, flow, and video segment for this module. Facilitators should use this narrated movie to help facilitate learning with their participants.

The entire workshop should take approximately 60 minutes when presented to a group.

Setting up

- Equipment
 - Presenter’s computer with video of “Module 1: Overview of the DLM Science Standards Framework Part 1.” This video should be accessed and reviewed well before the training at the DLM Professional Development website.
 - LCD projector with external speakers or sound system.
- Prior to the training, create the appropriate number of packets with these materials:
 - Agenda
 - Handouts and Worksheets
 - DLM Science Framework – Reference Sheet
 - Post Learner Assessment
- Learning Objectives
 1. Describe the DLM science standards framework dimensions.
 2. Define the term *Essential Element*.

3. Distinguish between the terms domain, disciplinary core idea, and topic as well as identify how these terms are used in EEs.
4. Understand the science and engineering practices and explain how they are used in EEs.
5. Define the term *crosscutting concept* and explain how they are used in EEs.

Section 1 – Introduction

- Greet the participants.
- State the title of the module and briefly review the learning objectives.

“Welcome everyone. The topic of today’s presentation is the DLM Science Framework. During the next hour, we will be learning a number of things about the DLM Science Framework including the framework dimensions and how the framework dimensions are used in Essential Elements.”

- See who is in your audience.

“As we get started, it will be helpful to know a bit about you. Raise your hand if you are a classroom teacher. How many of you are speech-language pathologists? Are there any occupational therapists here today? Physical therapists? Teaching assistants? How about school psychologists? School administrators? Did I miss anyone?” Ask anyone who raises a hand to say what job he/she does.

- Review the list of handouts.

“I’m glad all of you could be here today. We will begin the recorded presentation in a few minutes, but before that, please take a moment to review the handout packet you received. You should have a copy of the today’s agenda and the DLM Science Framework Reference Sheet.”

- Make sure everyone has all of the handouts before you start the module.

“Does everyone have a copy of each of these?” Supply extra handouts to anyone who needs them.

“Does anyone have any questions?” Pause to see if there are questions and respond appropriately.

“If there are no (more) questions, let’s go ahead and get started.”

Section 2 – Module

- Play the video.

After the module is finished, promote group discussion. Here are some suggested discussion questions:

- What are the dimensions of the DLM science framework?
 - Disciplinary core ideas, science and engineering practices, crosscutting concepts
- How are the framework dimensions used in Essential Elements?
 - Each Essential Element integrates the three dimensions, using one disciplinary core idea, one science and engineering practice, and one crosscutting concept
- What are the domains in DLM science?
 - Earth and Space Science (ESS), Life Science (LS), Physical Science (PS)
- What are the disciplinary core ideas in DLM science?
 - Concepts that represents core science knowledge
- Give an example of a disciplinary core idea.
 - Answers will vary
- What is the difference between a disciplinary core idea and a topic?
 - Topics are components of disciplinary core ideas
- What is the difference between a disciplinary core idea and a domain?
 - Disciplinary core ideas are concepts in domains
- What are the science and engineering practices?
 - Eight sets of skills often used by scientists and engineers
- Give an example of how students can use a science and engineering practice.
 - Answers will vary
- What are crosscutting concepts?
 - Overarching concepts that span multiple domains
- Give an example of a crosscutting concept.
 - Answers will vary

Section 3 – Wrap Up

- Pass out the post learner assessment.
- Once the discussion comes to a close, present everyone with a post learner assessment and say,

“The last thing we will do is complete the Post Learner Assessment.”

- Collect the assessment. When everyone has finished say,

“That concludes the DLM Framework Part 1 module. Thank you for your attention and participation.”