

EdgeEX Lesson Blueprinting

Lesson Blueprint Overview

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Lesson Blueprint Overview \mathscr{D}

Lesson blueprints serve as the planning documents for lesson-level development in Courseware. Typically, authors create lesson blueprints in batches by unit or topic to create consistency, reduce content overlap, and ensure 100% alignment to standards. Blueprinting starts after project kick-off and may be completed before the beginning of lesson development or continue as initial lessons are authored.

Lesson blueprints become the primary resource authors use to create the lesson manuscript. It's important that the lesson blueprint sets authors up for success.



A During blueprinting, authors must make decisions about the most important information a student needs to know in order to successfully master the learning objectives. Avoid overloading a lesson with too many details that will lead to a lengthy lesson of unnecessary complexity. Authors should blueprint content for the warm-up, instructional activities, and summary within the 20minute seat time limit. Refer to the lesson overview for lesson timing estimates by activity.

What a lesson blueprint IS	What a lesson blueprint is NOT
an outline.	a manuscript.
• concise.	overly detailed.
goal-oriented.	exhaustive.
flexible.	set in stone.

Lesson blueprints may be generated with trained AI bots, but a subject matter expert with an excellent understanding of the content, skills, standards, and product must review and finalize lesson blueprints.



Use an AI bot trained to produce a lesson blueprint in accordance with EdgeEX authoring guidelines.

• Al-Generated Lesson Blueprint Sample



Access the blueprint template here.

Blueprint: Lesson Information $\mathscr {D}$

The lesson information table provides important information to assist with authoring the lesson blueprint and important information for authors using the blueprint to create the lesson manuscript. The Curriculum Map and Unit Plan will provide the information needed to complete the table.

✓ Screenshot of the lesson information table in the lesson bluperint template		
	Lesson: [lesson title]	
	Lesson Code: [internal lesson code]	
	Lesson Overview: In this lesson, students will	
	Lesson Question: [lesson question]	
	Instructional Goal: [choose: concept, procedure/process, comparison, storytelling] Lesson Objectives: [list objectives]	
	Lesson Objectives: [list objectives]	
	Vocabulary: [list vocabulary and definitions]	
	•	
	DEI/Sensitivity: [explain topics, material that require DEI and sensitivity consideration]	
	Engagement/Interactive:	
	Primary Assignment: [type (practice, read, explore); additional details as needed]	
	Secondary Assignment: [type; additional details as needed]	
	Additional notes: [as needed]	
	Standards: [list full standards; strikeout portions that do not apply]	
	standards: [list full standards; strikeout portions that do not apply]	

3 Some lesson information is predetermined and may need to be revised as the lesson blueprint is fleshed out. Refer to these **guidelines** if revisions to lesson titles, overviews, questions, objectives, or vocabulary are needed.

Lesson Information	Guidelines
Lesson Title	Populate with client-facing lesson title found in the Unit Plan. This title must not already exist in Cosmos. Refer to the training video on how to search for client-facing titles in Cosmos.
Lesson Code	Populate with the internal lesson code found in the Curriculum Map.
Lesson Overview	Populate with the lesson overview found in the Unit Plan.
Lesson Question	Populate with the lesson question found in the Unit Plan.
Instructional Goal	Determine the best instructional approach based on the content and goals of the lesson. Choices include concept, procedure/process, comparison, and

	storytelling. Refer to the Lesson Segment Structure section below for more details on each.
Lesson Objectives	Populate with the lesson objectives found in the Unit Plan.
Lesson Vocabulary	Populate with the lesson vocabulary found in the unit plan. Add definitions for each word.
DEI/Sensitivity	List any topics or materials that require special care. Refer to the DEI Guidelines page.
Engagements/Interactives	Document any suggestions or needs for video engagements and/or interactives as a method of instructional delivery. The number of engagements and interactives is identified in the Requirements Document and may be limited to accommodate budget, resources, and scheduling constraints.
Primary Assignment	Identify the type of assignment appropriate for the lesson (practice, read), including additional details necessary for the assignment author to create the assignment. Refer to the Primary Assignments page for details.
Additional Notes	Communicate additional notes as necessary to ensure the lesson manuscript author has a complete picture of the lesson vision.
Standards	Populate with the lesson standards listed in the Curriculum Map. Do include the full standard, but strikeout portions that are not covered in the lesson.

Blueprinting: Lesson Segment Structure \mathscr{D}

Instruction is logically organized into two or three, rarely four, segments, each focusing on a cohesive part of the learning. In some cases, the segment structure corresponds neatly with the lesson objectives; in others, several objectives are met within a single segment or within several segments.

A segment focuses on a cohesive topic that can be broken down into smaller components or subtopics within the segment. Segments are chosen and arranged thoughtfully in a logical order. Each segment of instruction should help students arrive at an answer to the lesson question. Ensure that instructional segments focus on the most important information to avoid lengthy and overly complex segments.

Choose a structure that meets the instructional goal of the lesson.

Instructional Goal	Description
Concept	A lesson question introduces the main topic of the lesson. Each segment focuses on one example or aspect of that topic.
Process/Procedure	A lesson question introduces a method or system based on skills and/or strategies. Each segment describes a new step in how to complete the procedure.

Comparison	A lesson question introduces the main topic. The first two segments focus on different examples, while the third segment compares them, contrasts them, or describes a final outcome.
Storytelling	A lesson question introduces a situation. The first segment identifies key aspects of the situation, and other segments progressively describe what takes place.

Blueprint: Lesson Details @

This section provides information related to lesson instruction and will guide writers in creating instructional videos and tasks.

It generally includes:

- an outline of segment content.
- information related to tasks that conclude instructional videos.
- resources that may benefit the lesson writer.

i An instructional video consists of one or more slides of content that are recorded as one video. The blueprint should not include a slide-by-slide breakdown of each instructional video group but instead, a description of the instructional goals and approaches for each instructional video group.

Warm-up *⊘*

The warm-up activity consists of two video frames and one instructional task. Often, writers choose to blueprint the warm-up after the lesson blueprint is complete. Communicate your vision for the warm-up by documenting the goal of the warm-up (connect, engage, provide context, activate prior knowledge), the "hook," and the task. The lesson blueprint template includes a simple layout that authors can modify to suit the unique needs of the content.

Warm-up How will the warm-up engage the student and prepare them for learning?	

Examples

Lesson	Instructional Video Blueprint
Ecosystems and Biomes	 Anchor: Create a slideshow displaying images of a few of the climate zones, prompting student to think about how different each is and which they have experience with Instruction: Show a map that displays the climate zones of the world. Point out some patterns, like the polar zones at the north and south pole the temperate and tropical at the equator. Prompt

	students to notice which climate zone they live in and those nearby, Task: Display map. Survey question: Which climate zone do you live in?
Using the Midpoint Formula	 Activate prior knowledge Anchor display a map of a community to demonstrate a point A to point B scenario. Instruction: Demonstrate how to find the midpoint of a horizontal segment graphed on the coordinate plane (do not discuss averaging numbers) in the context of moving from point A to point B. Task: Find the midpoint of a vertical segment graphed on the coordinate plan. Graph given.
The Persian Empire	 Provide geographical context for students. For anchor use b-roll showing Persepolis today. Explain that this is modern-day Iran; Persepolis is the Greek name meaning "Persian City"; once the capital of the Persian Empire. For instruction: Show Greece and Persia on a map to discuss the proximity of the empires. Task: Use map to identify the proximity of the empire to Greece.
Analyzing an Autobiographical Essay	Provide geographical and historical context for students • Anchor: Use a map to show where the Dominican Republic is located. • Instruction: Provide context on the political history of the Dominican Republic. • Gained independence in 1844 • Ruled by dictator Rafael Trujillo (130-1961) • Provide factual details about Trujillo's ruling (violence, massacre of approximately 20k Haitians in 1937, oppressive, etc.)



Refer to the Warm-up Activity authoring guidelines for more information.

Instruction @

When blueprinting instructional segments, organize the outline to include the anchor and instructional video groups (one instruction video followed by a task). The lesson blueprint template includes a simple layout that authors can modify to suit the unique needs of the content.

Instruction 1			
What "big idea" will be the foo	us of this instructional so	egment?	
Anchor:			
Instructional Video:			
Instructional Video:			

Examples

Lesson	Instructional Video Blueprint
Ecosystems and Biomes	In 2-3 slides, define aquatic biomes, distinguishing between freshwater biomes and marine biomes. Conclude with a task that requires students to differentiate between freshwater and marine biomes.
Using the Midpoint Formula	 In 1-2 slides, model finding the midpoint between two points. The teacher shows how to find the midpoint given the endpoints. A graph of segment is shown. Endpoints are integers. Use the midpoint formula. The answer has an integer coordinate and a fractional coordinate. The teacher uses a graph to check the result. Task: Multiple Choice. Find the midpoint given the endpoints. Endpoints are integer coordinates. Include a graph
The Persian Empire	In 2 slides, describe Persia's political structure and economy under Darius. Describe the political structure under Darius Division of empire into 20 satrapies Satrapies governed by a satrap Each satrapy had a military commander reporting to Darius Included a postal service Describe the economy under Darius Tax collection (define tribute) Reinvestment of tax money to fund public work projects Road construction Common currency Task: quick-check Darius's political structure

Analyzing an Autobiographical Essay	In 3-4 slides, prepare students to identify the central idea of a text and cite details as evidence
	Explain what a central idea is and is not and present a strategy for identifying a central idea in a text and citing details as evidence
	Model the strategy using a passage from the anchor text.
	Task: Two tasks for applying the strategy. First, students will identify the central idea. Then, students will cite evidence that supports the central idea.

Refer to the Instruction Activity authoring guidelines for more information.

Summary *∂*

It's not necessary to blueprint the summary, but space is provided in case there is a unique need that the lesson author needs to know. The lesson blueprint template includes a simple layout that authors can modify to suit the unique needs of the content.

ummary /hat information is most critical for the review?	
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Refer to the **Summary Activity authoring guidelines** for more information.