

Is it STEM, STEAM or Arts Integration? How is each approach related? Use this chart to guide your understanding.

## STEM

## STEAM

## ARTS INTEGRATION

### Definition of the Approach

An **educational approach** which **intentionally** integrates science, technology, engineering, and mathematics to create **real-world learning** opportunities through **investigations**, **problem-solving**, and **evidence-based explanations**.

An **educational approach** to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student **inquiry**, **dialogue**, and **critical thinking**.

An **approach** to teaching and learning through which content is **taught and assessed equitably** in and through the arts.

### Use of Standards and Assessments

**Direct connection** to 2 or more STEM content standards. Both content areas are assessed within the lesson.

Similar

**Direct connection** to naturally-aligned content and arts standards. Both are assessed within the lesson.

Same

**Direct connection** to naturally-aligned content and arts standards. Both are assessed within the lesson.

### Purpose for Using the Approach

**Integrates any STEM area** with another STEM area through naturally-aligned standards surrounding a point of inquiry.

Similar

**Integrates any STEM area with another arts area** through naturally-aligned standards surrounding a point of inquiry.

Similar

**Integrating the arts and any content area** with another content through naturally-aligned standards.

### Foundational Support

Grounded in **inquiry**, **problem-solving** and **process-based learning**. The lesson is created intentionally to address these focus areas.

Same

Grounded in **inquiry**, **problem-solving** and **process-based learning**. The lesson is created intentionally to address these focus areas.

Different

Grounded in **aligned standards and assessment** through a central topic. The lesson addresses the standards within the context of the topic.

### Intention and Focus

STEM focuses on developing **higher level thinking skills** by connecting classroom learning to the real world through **hands-on investigations**.

Different

STEAM is **process-driven** through inquiry, design and creativity. The process leads to the product through a **discovery focus**.

Different

Arts integration **deepens** learning, application and creativity through a **connective focus**.

### How it Addresses Various Content Areas

**Addresses STEM areas explicitly**. Can utilize the literacy process and address the social sciences through the foundational lens of the approach.

Similar

**Addresses STEAM areas explicitly**. Can utilize the literacy process and address the social sciences through the foundational lens of the approach.

Different

**Direct inclusion of all content areas**, including E/LA, Social Studies, Math, Science, Technology, Engineering and other Fine Arts areas.