A framework to define

Imagination in STEM

Across literature on STEM practice and STEM education, definitions of "imagination" vary in a number of ways. The visual tool below presents a way to organize the characteristics of these definitions along three dimensions: **essence**, **ways of thinking**, and **context**. Using this framework, you can build definitions of imagination relevant to your work (see page 2).

ESSENCE How imagination is characterized/ what it is	WAYS OF THINKING Cognitive, physical, social, and emotional processes involved in imagination		CONTEXT Contexts towards which imagination is focused, or in which it emerges
Activity	Associating	Organizing	Within the self
Ability	Creating	Playing	In relation to others
Capacity	Creativity	Perspective taking	In relation to what is present to the senses
Faculty	Embodying	Possibilities thinking	In relation to what is present in reality
Foresight	Empathizing	Problem solving	In relation to past, present, future
Process	Feeling	Prototyping	In narrative contexts
Trait	Forming concepts	Reflecting	In play scenarios
Way of thinking	Futures thinking	Representing	
	Hypothesizing	Reproducing	
	Innovating	Self-identifying	
	Mental practice	Speculating	
	Moral thinking	Transforming	
	Navigating inconsistency	Understanding	
	Noticing	Visualizing	
		Wondering	

COMMON DEFINITIONS OF IMAGINATION

Ability	TO	Visualize	In relation to what is present to the senses.
Activity	OF	Possibilities Thinking	In relation to past, present, future.
Capacity	FOR	Creativity	In relation to what is present in reality.

Build your own definitions

Use the tool below to build definitions of imagination relevant to your work.

DIMENSIONS

Write in your favorite terms from page 1 or add in your own.

ESSENCE	WAYS OF THINKING	CONTEXT

COMBINATIONS

Write in your own combination of terms (the top line is an example of a combination for reference).

Example Combination	**Ability**	**TO**	**Visualize**		**In relation to what is present in reality**
Write your own					

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