

Classroom Ecosystem Explorer (CEE) Guidelines for Choosing a Representational Format

<p>Do you want students to learn about what the structure of something is?</p>	<ul style="list-style-type: none"> • Does the concept you want students to understand involve something with various parts? Is it important that students know all the parts? Is it important that they know the names of the parts? • Is it important that students understand how the parts of things relate to one another? • Is it important that students know the spatial relationships between the parts? (e.g., on top of, above, to the right of, etc.) • Is it important to understanding the concept to know what different things look like? (e.g., shape, color, etc.) 	<p>If so...</p> <p>Your students could make two-dimensional or three-dimensional representations</p> <p>Two-dimensional representations help students see how aspects of a concept are placed near each other</p> <p>Three-dimensional representations are helpful if you also want students to see whether aspects of a concept are in front of or behind each other</p>
<p>Do you want students to learn about how things behave?</p>	<ul style="list-style-type: none"> • Does the concept you want students to understand involve something happening across time? • Does the concept involve things that are moving or things that are physically/causally connected to each other? 	<p>If so...</p> <p>Your students could make kinesthetic, oral/textual or two-dimensional representations</p> <p>Kinesthetic and oral/textual representations help students get a sense of changes over time</p> <p>Two-dimensional representations are helpful when comparing images of time side by side</p>
<p>Do you want students to learn about why things work the way they do or about their function in some larger process?</p>	<ul style="list-style-type: none"> • Does the concept you want students to learn involve “actors” that have intentions, desires or goals? • Is it important to know about how this concept relates to other concepts? (e.g., the importance of temperature in the states of matter) • Is one of your goals to have your students understand why it is important for them to know this material? 	<p>If so...</p> <p>Your students could make oral/textual representations</p>