

Strategies to Create a Coherent Science Content Storyline

STeLLA STRATEGY H HIGHLIGHT KEY SCIENCE IDEAS AND FOCUS QUESTION THROUGHOUT

The content storyline is easier to follow if the main learning goal, supporting science ideas, and the flow of events are highlighted at key points during the lesson.

Highlighting actions include

- referring back to the focus question throughout the lesson;
- writing key science ideas on the board, transparency, or chart paper;
- telling students, “this is a key science idea”;
- having students write key science ideas in their notebooks;
- providing visual representations that highlight key science ideas;
- revisiting key science ideas multiple times in a lesson; and
- summarizing at key transition points in the lesson.

The teacher can highlight key science ideas in many ways, for example, by having students say or repeat important ideas, by asking questions that require students to restate or use the science ideas, by pointing out that a particular science idea is very important, by guiding students to underline or highlight key sentences in a reading.

The students can also take the lead in highlighting key ideas. They might be asked to identify the key ideas from a reading, or they might be asked to respond to a question about the most important science ideas discussed in the lesson so far. For example, the teacher might stop at key transition points in the lesson to highlight the ideas developed so far:

- What does this activity with these amino acid puzzle pieces tell us about our focus question? Let’s write down the main things we’ve learned so far.
- What ideas do we have so far why different jaguars have different fur color?
- Did the characteristics of *individual* stickleback fish change because they wanted to, or needed to, in order to survive in the freshwater lake environment? If not, can you say in your own words why the fish look so different in 2015 than they did in 1990 when researchers first found them in the lake?