

Concept Attainment Strategy

Source: Stern, J., Ferraro, K., & Mohnkern, J. (2018). *Tools for Teaching Conceptual Understanding, Elementary: Harnessing Natural Curiosity for Learning That Transfers*. Thousand Oaks: SAGE Publications.

<p>What is this strategy?</p>	<ul style="list-style-type: none"> ★ The goal of concept attainment is to have students develop their own definitions for a concept/vocabulary by investigating several examples and non-examples. ★ This strategy is ideal for concepts/vocabulary that students likely don't have much prior knowledge or understanding about. ★ This strategy mimics how the brain works when learning and forming new understandings.
<p>How do I implement this strategy?</p>	<p>Here's a science example in practice: (Math: Attributes of 3-D Objects)</p> <ol style="list-style-type: none"> 1. Examples: Students are asked what it means for something to be living. After writing down their initial thoughts, show several picture examples of living things. <ul style="list-style-type: none"> ○ Show pictures of humans and several animals. Students might share that living things run, eat and breathe. ○ Now show pictures of trees, flowers, mosses. Students can then revise their answers as a result of these new examples. ○ Now show pictures of pinecones, roadkill since living things refer to anything that is or has been alive. 2. Distinguishing Examples for Non-Examples: Once students have a baseline, starting definition about the concept, they can move on to apply these definitions to even more examples and non-examples. <ul style="list-style-type: none"> ○ Put students into groups and give them an assortment of pictures showing living and non-living things. Students apply their definition to sort the pictures into 2 piles - 1 for living, 1 for non-living. Once they've sorted the pictures into 2 piles, have them compare their group's sort with another group's sort. 3. Confirm Critical Attributes: The focus now is to take their initial, baseline definition and push it to become a more fleshed out, formal definition based upon teacher guidance of what the critical attributes of a living and non-living things are. 4. Reflection: Ask students the following questions to think about their learning. <ul style="list-style-type: none"> ○ <i>When was it that you "got" the concept?</i> ○ <i>Which examples or non-examples were most challenging for you?</i> ○ <i>How did your partner/group help you develop your understanding of the concept?</i> ○ <i>What makes a concept different from a fact?</i> ○ <i>How is it different to learn about a concept as opposed to a fact?</i> 5. Concept Wall and Concept Maps: Designate a space in the room to be a concept wall for putting all the concepts as students study them.
<p>What materials do I need?</p>	<ul style="list-style-type: none"> ★ Board or wall space for creating a Concept/Vocabulary Wall. ★ Several example and non-example image cards of the concept(s)/vocabulary.