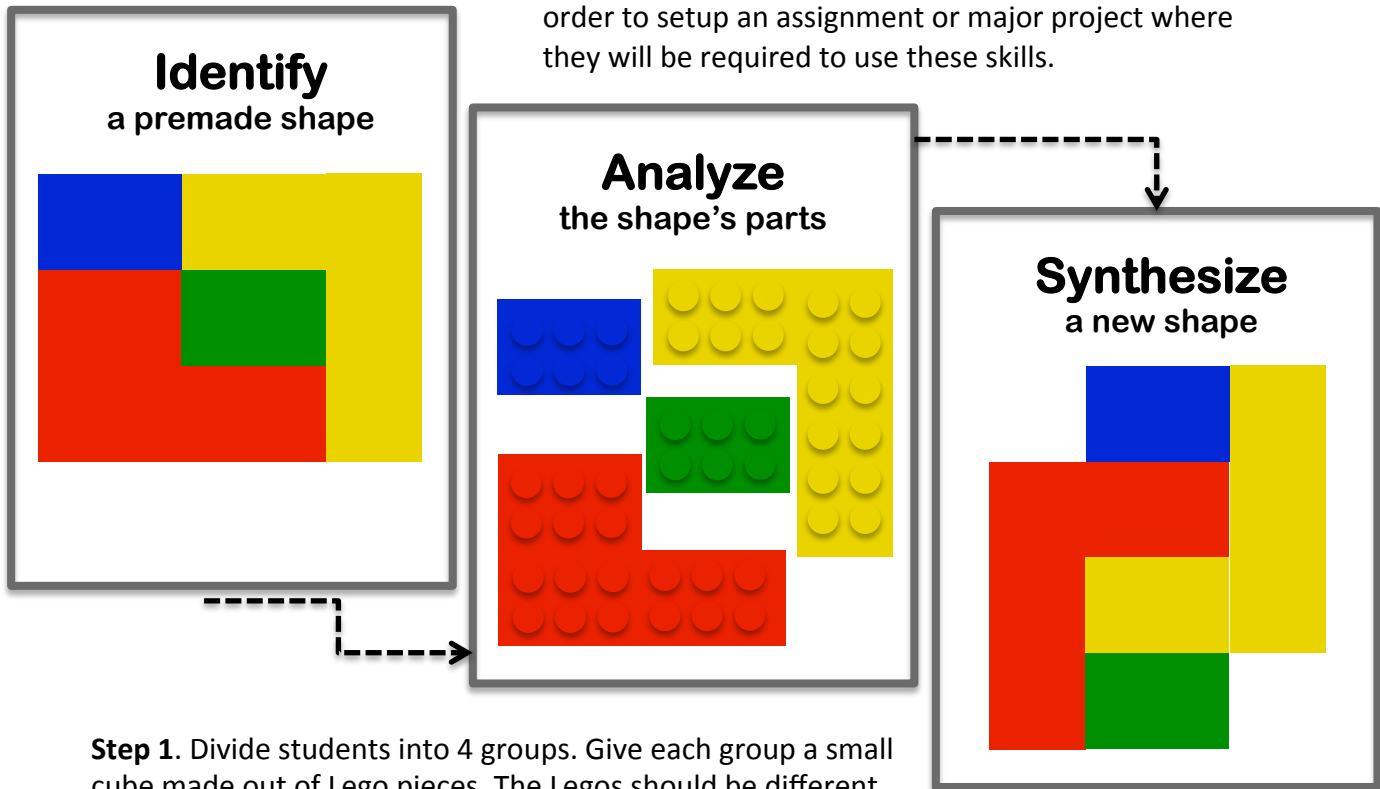


Analysis and Synthesis

Learn with Legos

Analysis and synthesis are key concepts to critical thinking, but these abstract terms can make students' heads spin. Make the abstract tangible by using Legos to visualize and build these concepts, first by taking apart a premade shape (analysis) and putting them back together in a new way (synthesis). This activity introduces and illustrates how to do analysis and synthesis to students in a WRT 150 class, in order to setup an assignment or major project where they will be required to use these skills.



Step 1. Divide students into 4 groups. Give each group a small cube made out of Lego pieces. The Legos should be different colors and shapes and all of the cubes should be constructed in a different pattern of pieces, instead of looking all the same. Ask the students to first recognize the shape of the Legos. They should confirm “a cube” or something similar.

Step 2 Ask the students to disassemble the Legos into the individual pieces. Once they have done so ask, “How was the cube made?” and have them respond by describing the Lego pieces and pattern that once made up the cube. Each group has different pieces to talk about.

Step 3 Briefly explain that this is how we do analysis, by breaking down the parts or components of something and evaluating how and why they were used.

Step 4 Now, ask the students to take their Lego pieces and build something new with them. Either leave it up to the groups what they build, or give each group a specific goal such as, “Build something long and narrow/flat and square/etc.”

Step 5 Explain that is this how we do synthesis, by taking different pieces and putting them together to fulfill a new purpose.

Step 6 Once the students understand the concepts of analysis and synthesis with the Lego pieces, immediately after give the groups a chance to practice their analysis/synthesis skills with text. This can be done in the same groups or new groups.

To practice analysis, you might assign each group to look at different components of the same short reading, such as arguments, evidence, organization, audience, persuasive appeals or whatever is relevant to the course at that time. Once the groups have had time to try and analyze their assigned components, have each group report to the class as a whole on their conclusions and interpretations of the reading.

In order to practice synthesis with text, chose 2-3 short readings on the same topic and give copies of them to each group. Each person in the group will read a different text (if you have extra people, assign some readings to pairs). Once all the group members in each group have had time to read the texts, have group members report briefly to their group about what they read. Then, assign each group a different question to answer on the topic, which they will need to answer with evidence from their readings. Once groups have had time to compose their answers by synthesizing their texts, have them report their answers to the class.

Afterward, debrief and reflect on the whole experience as a class.

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