

Cubing

Cubing requires students to look at a topic from six different angles. Teachers often create a visual cube that serves as a starting point when they want students to analyse or consider various aspects of a topic. Cubes can be used as an after-reading strategy that requires students to think critically about a topic. When students work with cubes they apply information in new ways. Cubes can be differentiated by interest and readiness.

Introducing the strategy to students

One of the best ways to introduce cubing is to apply the activity to a common or familiar object.

Select an object appropriate to the age and interests of the students, distribute the object to students and then assign groups to look (or study) the object from several angles.

Students work in assigned pairs or groups. If desired, the groups can be created by readiness levels since the cubing perspectives below begin at the least complex level and become increasingly complex. Using the object as the topic, ask students to:

- describe it – What does it look like?
- compare it – Compare the object with something else. What is it similar to or different from?
- associate it – What do you associate the object with? What does it make you think about?
- analyse it – Describe the object's parts? How is it made?
- apply it – What can you do with the object? How can you use the object?
- argue for or against it – What is an argument for or against the object?

Give students about 10 minutes to build a mini-presentation. One student in each group presents to the class.

Steps for cubing

1. Select a topic. For example, World War 1 (WW1). Decide in advance how much time you want to devote to the cubing process. Informal cubing activities can easily be accomplished within a class period. However, activities can be extended if research is required.
2. Create groups based on readiness or interest.
3. Assign each group a perspective from which to explore the topic.
 - Describe WW1.
 - Compare the WW1 to another war.
 - Associate the WW1 with other issues, topics, or concerns.
 - Analyse the WW1 by discussing the events and decisions that led to the war.
 - Apply the lessons you've learned from studying WW1. How does learning about WW1 help you understand events, issues, topics, and decisions that still exist today?

Argue for or against WW1. Should the war ever have been fought? Take a stand and list your reasons.

4. After the designated amount of time, ask representatives from each group to present their perspectives.

Adaptations

- Design cubes based on interest or learning profiles.
- Use the cubes for independent work. Require students to complete each element on the cube but allow them to pick and choose the order in which they complete the activities.
- Use the cubes as dice which students roll.
- In maths, create problems for students to solve. One problem is printed on each side of the cube.

Rick Wormeli (2006) suggests incorporating Bloom's Taxonomy:

- Knowledge—students recall and cite content
- Comprehension—students demonstrate their understanding of the content
- Application—students use their knowledge and skills in a different way or situation
- Analysis—students break down topics into pieces and analyse them
- Synthesis—students consider aspects that seem to contradict each other and form something new
- Evaluation—students use their previous learning to judge the value or success of something guided by specific criteria.

References

Wormeli, R. (2006). *Fair Isn't Always Equal: Assessing & Grading in the Differentiated Classroom*. Portland, ME: Stenhouse.