

SAMPLE CHAPTER

ABC Cups

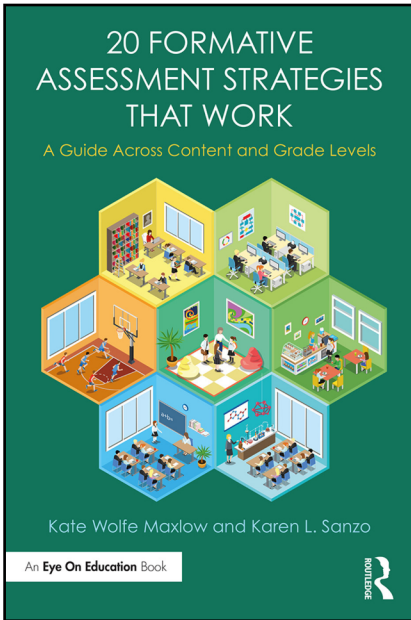
from *20 Formative Assessment Strategies that Work*



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Contents



1. ABC Cups

By Kate Wolfe Maxlow and Karen L. Sanzo

from 20 Formative Assessment Strategies that Work: A Guide Across Content and Grade Levels

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ABC Cups

Description

This formative assessment works well as both a pre-assessment and throughout the lesson itself.

You will need three class sets of paper or plastic cups—one class set per color. (Hint: red, yellow, and green work really well and can be used for multiple purposes.) You can give each student, each pair, or each group a set that has each color in it. Note that for older students, you can add a fourth color. Mark one color with A (let's say green), one color with B (yellow), and one color with C (red).

When students enter the classroom, ask them a question with three potential answer choices, and let them know that one or more of the answers can be correct. For example:

Which of the following is/are true about George Washington? Choose ALL that apply and move the cup with the corresponding letter to the RIGHT of your desk.

- A. He was the first president of the United States.
- B. He was elected unanimously.
- C. He was assassinated.

The teacher can easily see incoming student misconceptions and tailor the lesson to meet them. The teacher should designate certain checkpoints throughout the lesson for students to update their original choices by moving cups if necessary, and the teacher can use these checkpoints

to determine who is “getting it” and whether individuals or the class as a whole can move on.

While pieces of colored construction paper can also be used, cups are recommended because they are more easily seen from the front of the classroom.



Category of Cognitive Process Dimension

Because this is a Select Response task, it can generally assess up to the Analyze level, depending on how the question is written.

Learning Management

The teacher will need to model and set procedures for appropriate use of the cups. For instance, the teacher might want to model how students should not look at their peers when determining where to move their cups. If students are using the cups in pairs or groups, the teacher will want to model how to have those on-task conversations that take both students’ opinions into account.



Using the Data Effectively

This is an on-the-spot formative assessment that can be used to guide a lesson in the moment. It can be combined with an Exit Ticket on the same or a similar question in order to determine individual student understanding in more depth.

Modifying and Differentiating the Strategy

The cups can also later be used for independent work so that students who put a red cup on top “Need the teacher’s assistance help right away to continue work”; those with a yellow cup “Need the teacher’s assistance but can keep working in the meantime”; and a green cup on top means, “All is well; no assistance currently needed.”

Another interesting idea is to have students rank choices using the cups instead of choosing correct answers.

Examples by Subject



These examples are questions and answers that could be used for the various subject areas.

English Language Arts

Which of the following are examples of similes?

- A. His smile was as bright as the sun.
- B. She talked a mile a minute.
- C. He drank like a camel.

Mathematics

Which of the following does NOT equal 19 if $x = 8$?

- A. $3x - 8$
- B. $2x + 3$
- C. $4x - 13$

Science

Which of the following are present in animal cells?

- A. Nucleus
- B. Mitochondria
- C. Cell Wall

Social Studies

Which of the following was *not* a result of Reconstruction?

- A. Freed African Americans needed food, clothing, and shelter.
- B. Northern railroads and farms were destroyed.
- C. Sharecropping became an important system in the South.

World Languages

Which of the following mean “large” in Spanish?

- A. Importante
- B. Numeroso
- C. Amplio

Music

Which of these instruments is/are in the brass family?

- A. Trombone
- B. Trumpet
- C. Saxophone

Visual Arts

Which of these is a primary color?

- A. Red
- B. Purple
- C. Green

Health/Physical Education

Which of the following are rules in basketball?

- A. Once the offensive team puts the ball in play behind the mid-court line, it has 10 seconds to move the ball over the mid-court line.
- B. The ball is moved by dribbling and passing.
- C. Free throws are worth two points.

Library/Media

Which genres of books do you enjoy reading?

- A. Poetry
- B. Fiction
- C. Nonfiction

Career and Technical Education

Which of the following would be appropriate uses of business email?

- A. You send an email notifying an employee that his job is being eliminated with a link to unemployment resources.
- B. You send an email to your employees with a link to your little sister's wrapping paper fundraiser in case they want to buy some.
- C. You send an email to a colleague asking about progress on a project with an upcoming deadline.

The Task from Start to Finish



Identify

Melia Richards teaches second grade and is going to teach on Earth events, including volcanic explosions, earthquakes, and mountain formation. She

wants to determine her students’ background information and to formatively assess their progress as they research volcanoes and earthquakes using provided books and websites. She decides to use the ABC Cup strategy to see if students know whether the aforementioned Earth events are generally considered “fast” or “slow” processes.

Plan

Melia unpacks the following standard:

2-ESS1–1: Use information from several sources to provide evidence that Earth events can occur quickly or slowly. [Clarification Statement: Examples of events and timescales could include volcanic explosions and earthquakes, which happen quickly and erosion of rocks, which occurs slowly.]

Phrase	Cognitive Process Dimension Category	Reasoning
Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	Understand	The thrust of the standard is not simply that students are memorizing whether some events are faster or slower, but rather that they are using the cognitive process Infer in the Understand category, which means that they are drawing a logical conclusion from presented information.

Apply

At the start of Science, Melia hands each student the following cups: A (green), B (yellow), and C (red). She puts the following question on the board:

Which of the following happen QUICKLY? Move that cup to the front of your desk.

- A. Volcanic explosions
- B. Earthquakes
- C. Mountain formation

Melia reads the question aloud to her class. She has students move cups to the front and back of their desks because some students still struggle with left/right and she does not want that to interfere with the validity of the formative assessment.

Assess

Melia notes the following breakdown of her 23 students at the beginning of the lesson:

Type of Earth Event	Number of Students Who Say It Happens Quickly	Number of Students Who Say It Happens Slowly
Volcanic explosion	19	4
Earthquake	13	10
Mountain formation	8	15

Melia puts her students into pairs and provides several materials, including library books with specific passages marked and student-friendly websites and videos linked on her class website. She has done similar research lesson with her students before, so they are familiar with working in pairs to review materials. She provides each student with a graphic organizer to help guide the work.

Melia knows she needs to pay special attention to students when they work on the earthquake and mountain formation section of their research. Therefore, she tends to hover more frequently near the earthquake and mountain formation materials because she has organized the materials for each type of Earth event in different areas of the room,

Halfway through their research, Melia has students return to their seats and revisit their cups, moving them if they find it necessary. She takes another quick count and sees the following:

Type of Earth Event	Number of Students Who Say It Happens Quickly	Number of Students Who Say It Happens Slowly
Volcanic explosion	23	0
Earthquake	18	5 (Lucas, Amily, Tilda, Jackson, Reese)
Mountain formation	17	6 (Lucas, Amily, Tilda, Jackson, Veronica, Jim)

This time, Melia targets the students who still have one or more answers incorrect and works with them specifically to help them find the correct answers and understand.

At the end of the class, Melia gives her students one last opportunity to move their cups and has the following results:

Type of Earth Event	Number of Students Who Say It Happens Quickly	Number of Students Who Say It Happens Slowly
Volcanic explosion	23	0
Earthquake	22	1 (Lucas)
Mountain formation	22	1 (Amily)

Melia meets with Lucas and Amily again to review specifically with them while the rest of the students clean up.

Refine

Melia decides that next time she will also have the students use the cups as an indicator of when they need help by changing them from green to either yellow or red when they need assistance.