

Teaching Tips  
MASTERY FOR ALL STUDENTS: FLASH-CHECK CARDS  
by Larry Flammer

First, you need to decide what **specific standards** ALL students MUST understand for the current topic (minimum mastery).

Then, you need to craft some multiple choice questions that actually measure those understandings (probably 2-3 questions, or more, for each concept). This doesn't just mean knowing the definitions of selected terms. Even more important is the ability to recognize critical aspects of the concept and how it relates to the real world, its practical applications, so they must answer appropriate discriminating questions with subtly different choices. If you've got good multiple choice questions from past tests that do that, include them. This makes for a good formative assessment, especially if you reword the questions a bit for the summative tests.

It's always helpful if you can ask a few questions immediately after explaining something, to see if they understood. This is much more productive than simply asking "Are there any questions?" It can be a short quiz (with different forms for adjacent students to discourage "glancing for answers"). It doesn't even have to count, just a "Check Quiz" which could be self-graded by the students. Or, do a "Flash Check".

**FLASH CHECK CARDS:** This is something I created years ago to get instant feedback from the class. It's a poor-man's version of the much more costly electronic "clicker" systems used increasingly in colleges and even in secondary schools. It consists of a collection of packets of light, colored poster-board cards, using at least 5 or 6 different colors.

1. Cut the poster boards into 5x7" cards (size not critical; 8x10 would work, better, but is more costly);
2. Put all the cards of one color in a pile, color-side down; lets start with **white**;
3. On the back of each card, put a clear, sharp letter **A** in its lower left corner;
4. Repeat with all the cards, of another color, say **black** putting a **B** in the lower left corner, etc.
5. Then, put together sets of cards, each set with one card of each color, so each set has an A card, a B card, etc., and put each set into a suitably-sized manila envelope. There should be one packet for each student to use.

**USING THE CARDS:** Each student holds the cards horizontally together in a stack, with the colors facing down. I display a short question on the overhead, with multiple choice answers (A-E... or higher if you used enough different colors). You read the question and the choices aloud. Students **QUIETLY** (that means without ANY conversation or looking at each other) select the card with the letter they think (or know) is the **BEST** answer, slip that card sneakily to the **BOTTOM** of the stack, (so its color faces the table), square the stack, and grasp the entire stack ready to hold up when you count "1-2-3-up...-down". When they flash the stack up for a second, exposing the (selected) bottom card color toward you, at the front of the room, you get a very quick array of color. Hopefully, you see all the same color, and it's the correct color, matching the best answer. If there is a mix of colors, it means some (most?) didn't get it, and you will need to go back and explain the concept again, maybe in a different way, or find out what's causing the confusion. The questions could be the same or or similar to those in an upcoming test, so this could be a good review.

Do a "Test Run" or two before it "counts," saying "choose A," then "1-2-3 UP." Make sure that each student is holding all the cards together in a squared-away stack (so students in back can't see what was chosen). And also make sure that they all have the same color showing to the front (White, if A is white). It's important for the cards to come down quickly after going up, so the kids don't have a chance to look around and see who "missed it". Do all you can to make sure that the responses are relatively private, between you and the kids, and not "shared" amongst the kids. That way, those who don't know or are unsure won't be embarrassed, and will at least try. Tell them to pretend they know the answer, even when they might not!. Sometimes their subconscious knows more than their conscious! Insist that they all try... select an answer and hold up the stack... for each question asked. Of course, **NEVER** point out anyone who happened to miss a question! When done testing,

have them return the cards to their envelopes and put them off to one side (in a box or other convenient container) so they won't get written on or played with... Before you begin the questions, have the color of the best answer for each item conveniently (and privately) at hand, so you'll know which color to look for immediately. Kids should be thinking in terms of letters (for the choices), NOT the colors, so don't make comments about the colors. You also should have the questions and choices ready before the period begins. Some sets of choices could be used for 2 or more questions.

An interesting (and entertaining) diversion is to plan and practice a "card stunt" - like they do at football games. Plan the simple pattern, letter(s) or word on a grid seating chart of your room, and place the letters for the desired colors to display that pattern/word on command. Prepare a handout listing the desired letter for each seat number. For example, when a new student enters the room, give the signal to show a big "HI" with the cards. Principals can be very impressed with this, especially when you can explain how this gives you instant feedback on concept understanding.

If there is any service in your district for making audiovisual materials, or perhaps a volunteer parent who wouldn't mind building your sets of cards, take advantage of it. There is, of course, a cost for these materials, but it's something you can use over and over again, in any class, for many years. I preferred large, thicker poster board cards with gray backing, about 8x10, but make whatever you can afford. Emphasize to the kids that these are tools to help you (the teacher) to get useful feedback, to see if they really understand a topic or not, so you can help them right away if there's a problem. As for the colors, I chose these: White=A (or true); Black=B (or false); Red=C, Green=D, Blue=E, Yellow=F, Brown=G, Lavender=H.