Tech: Webcam Grading for Assignments and Assessments

This resource is related to the “Use the Right Tools” section of the “Technology:” chapter of the book First Aid for Teacher Burnout: How You Can Find Peace and Success. It will help you collect the proper tools and will show you an example of how these tools can be used.

First, understand how this setup can work. You can use an ordinary webcam to instantly score assignments and assessments. For example, as they walk into class with homework or finish a test, students can simply drop their answers in a tray under an $8 webcam or hold them in front of your laptop webcam, and:

• students will instantly see how they performed;

• you’ll instantly see visual displays and scores of performance for the whole class, each student, student groups, etc., and can instantly group students and differentiate wisely;

• scores can instantly and automatically load to your gradebook, your data system, the student and parent portal, progress reports, transcripts, etc.;

Though this setup works fastest with objectively-scored items, open response questions and tasks can be accommodated in slightly different ways.

Next, assemble the specific tools itemized below (if using other tools, follow instructions specific to and provided by those software programs):
1. Get a webcam. Most computers and laptops come with webcams inside them (see that tiny circle just above your screen). If you choose to use this webcam for scanning, students will have to hold their bubbled sheets in front of the webcam. It is more convenient to get a webcam you can secure (looking downward) above a tray in which students can drop their bubble sheets. Purchasing a Sharpat Kit (www.sharpatkits.com) to hold the webcam and papers makes the process especially easy for teachers and students. Whatever your setup, this webcam should be hooked up to an in-class computer or laptop.

2. Get software. The above scenario is made possible by software like Gradecam (www.gradecam.com) or Lightning Grader (www.lightninggrader.com). If you build the assessment or assignment within a tool like Illuminate Data & Assessment Management (DnA) (www.illuminateED.com), you can give students separate versions of the same assessment or assignment to avoid cheating (which leaves the computer to sort out which student has which version), along with numerous other perks and timesavers.

Determine whether or not your school district provides a tool like GradeCam or Lightening Grader. Its function might be embedded within other software (e.g., a data system like Illuminate DnA, so scanned scores can automatically populate your gradebook and data displays). If such technology is provided, acquire the help you need to start using it.

If your school district doesn’t provide a webcam grading tool and will not pay for it, you can often do a free trial and then pay a small monthly fee to keep the service just for yourself and your students. Visit the company’s website for details.

3. Get bubble sheets to hand out with (or within) the assignment or test. For the software described above, students will need to have a piece of paper on which they can bubble correct answers and respond to any non-multiple choice questions, as well. Follow your chosen scanning software program’s directions for printing a bubble-friendly sheet to accompany the homework assignment or assessment you hand out.

Most programs let you develop an answer sheet with a combination of multiple-choice items with open-answer items (e.g., an essay, project, paragraph, etc.), or you can use just one form
or another. Just know that the multiple-choice items will be scored as soon as the student turns the sheet in (i.e., drops the sheet under the webcam), whereas you will need to personally bubble scores for subjectively-graded items, or else type them into the gradebook or assessment program (e.g., Illuminate DnA) later.

**Finally,** considering the steps below as one approach to using webcam grading for assignments and assessments:

1. **“Build” your assignment or test answer key** in the software you’ve selected. For example, when students’ answers are scanned, the software (e.g., GradeCam, Illuminate DnA, or Lightening Grader) needs a way to know what the correct answer for each question or item is, how to weight scores, etc. Whichever software program you use should have instructions on how to add a particular assignment’s answers to the system.

2. **Print “bubble sheets”** on regular printing paper (see image at right) or use other scanning forms your software requires. This “bubble area” is the area upon which students will bubble their multiple choice answers (e.g., “B” as the answer to question 1).

Follow your software’s directions to be sure you prepare the right forms. Test them before students use them; you don’t want to waste student time or your time copying students’ answers onto new forms because the wrong forms were used.

Some scanning software will even allow for the area in which each student bubbles answers to be included on a standard worksheet (e.g., next to the sheet’s other contents and questions, as
seen at right), or a laminated bubble sheet can be used over and over if students bubble answers with dry erase markers.

③ Instruct students to complete their assignment or assessments by bubbling answers for the multiple choice questions and also answering/completing any non-multiple-choice tasks (which don’t require bubbling answers). As covered in the “Grading:” chapter, you can always bubble or enter scores yourself as you judge appropriate, such as for rubric-based work or open-response answers. You can also use a combination of questions so that students can see their performance on multiple choice questions as soon as their answers are scanned, but must wait for your manually-bubbled rubric scores.

④ Train students to scan their work upon entering the classroom or upon completing the assignment or test in class (or other designated time). This will be based on your particular hardware setup (covered earlier, in the webcam section). For example, each student might drop his or her sheet of paper underneath a standard webcam, such as by dropping the sheet in a tray above which the webcam is secured.

⑤ The student will instantly see how he or she performed on the multiple choice questions, as will you. If your school district uses a data system (such as Illuminate DnA) that integrates with webcam grading software, the scores can also instantly populate your gradebook, the student and parent portals, and your data system, and you can instantly see class performance by standard, by student group, etc. The gradebook can then automatically populate your progress reports, report cards, standards-based report cards, transcripts, etc.