

In [a previous article](#) , I discussed the workflow of giving a MOARS quiz to students in class. In that scenario, students went through a quiz at their own paces, albeit within a set time limit. In this article, the students are all accessing the same question at the same time. First, I'll go over some reasons why you might want to do this, and then I'll go through the workflow.

Why Lockstep?

You'd want to have all of your students on the same question at the same time if you were giving a quiz or survey that depended heavily on something you were showing them at that very moment on an overhead projector. You could also be asking students the question, or giving them the options, or saying both aloud. The best reason, though, for lockstep is when you're integrating the question/response into your teaching.

Integrating Questions / Responses Into the Lesson

So, during the class, you pause to ask the students a question that goes to the heart of what they're supposed to be learning at the moment. You ask the question, and look at students' results. These results will give you feedback on how much the class understands, and it should inform your next move:

- If there are many wrong answers, then maybe the class is very confused, and needs to take a step back, or a new approach.
- If about half or more of the students "get it", then now it's time to put your students into groups to have them explain their answers to other students, a well-explored technique that helps all students: Those who understand will deepen their grasp by articulating it to others and answering their questions; those who don't understand will benefit from a peer explanation.
- If nearly all of them seem to understand it well, and you can take the next step forward.

Even if this is a question with a right answer, you may want to try this as a survey, so that the class can all see how the answers were distributed. (Remember, surveys don't reveal which answers match with which students.)

Lockstep: The Workflow

Workflow: Lockstep Quizzes and Surveys

Written by Bill Pellowe
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The first thing to do, of course, is to get the students all logged in. I discussed this in [another article](#), so I won't repeat that here.

Create the Activity

If you're doing this as a quiz activity, prepare a generic quiz with random answers. The default quiz activity is probably fine here (with the question simply, "Answer the teacher's question", and the options listed as A, B, C, D and E). Print out a copy of the quiz so that you know which options are the correct ones. (*Home Menu, under "Quizzes", choose "List all the quizzes", select it, choose "See Full Quiz", then from your browser's File menu, choose "Print"*). Keep this ready during your class, so that it's easy to refer to.

If you're doing this as a survey activity, follow the advice above for quizzes. You may want to think about how many options to include. You probably will not need all 9 options for every question.

Ask the Question

When it's time to ask a question, inform the students that a question is coming. Hopefully, they're all already logged in and the question page is ready in their browser.

You can simply say the question and options aloud, but having them written out helps avoid confusion. The best option is to plan ahead, so that the questions and options are already prepared in a format that's easy for you to show to all of the students. You could also just write the options on the board.

Analyze the Results

When you ask the question, give them a minute or two to answer. Then, you should look at the results.

- If it's a quiz activity, you can see how many of them answered correctly the first time, and how many needed more than one chance to answer correctly (*Home Menu, under "Quizzes", choose "See quiz results", choose the relevant quiz. Refresh the page for the latest results*). You can choose to tell students how many of them got it right the first time.

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- If it's a survey activity, each student can only answer one time, and you'll be able to see how many students chose each option *(Home Menu, under "Surveys", choose "See survey results", choose the relevant survey. Refresh the page for the latest results)*. You can show the results page to the students, and you may be able to show them a pie chart of the results (this depends on your browser capabilities; it'll work with Safari and Firefox, but not with MS Explorer).

While you're doing this, be sure that students aren't falling behind or getting ahead. Be unambiguous about which question you're working on.

Leftover Questions?

At the end, if you have questions left unused in a quiz, you should try to use them up if you're going to be adding these results to the student gradebook. Maybe a series of review questions would be the way to go here. If it's a survey, there's less of a problem with unanswered questions, because students can get a participation point for every question answered, and that doesn't depend on the entire survey being finished. However, it's a good opportunity for a quick feedback session, asking questions about the lesson ("Do you think you learned something?", "Were the questions too difficult?").

Which Are Better, Surveys or Quizzes?

For this type of lesson flow, I believe a survey is fairer than a quiz. However, every situation is different. If you find that your students are taking advantage of the unaccountable nature of surveys by answering randomly, you may want to use quizzes.

However, quizzes require a single unambiguously correct answer, and surveys allow for flexibility and interpretation. In a literature class, you may ask about a student's interpretation of a character's motivation, for example. Such a question may lead into a class discussion on that topic.

Furthermore, at the end of a survey, you can show the students a pie chart of all of the responses. This may mean that MOARS needs an equivalent to this for quizzes, too.

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Why not use both?

If you like the notion of surveys, but feel the need for the type of scores generated by quizzes, why not use both?

1. In lockstep, the lesson proceeds with students answering survey questions every now and then.
2. Near the end of the lesson, steer the students to a quiz that uses the same or similar questions.

That's one way to do it that will most likely encourage students to take good notes during class.