What are kids learning about climate change in school? As children are about to head back to school, this seems like an especially appropriate time to ask that question.

The good news is that nearly all students are likely to be exposed to the basics about climate change. Covering the subject is required by school science standards in every state. Idaho recently flirted with the idea of dropping the requirement but retreated under pressure from teachers and the students themselves. For those taking more advanced classes, the Advanced Placement requirements for both Biology and Environmental Science require coverage of the key issues.

The bad news is that for many students their exposure to climate science is brief and often garbled. In 2016, the journal *Science* published the results of a survey of U.S. middle-school and high school science teachers. The researchers found that three-quarters spent at least an hour discussing recent warming, including 70% of the middle-school teachers and 87% of Bio teachers. Between the two classes, the researchers estimate that nearly all students encounter the subject in one class or another. But many students are getting a muddled version of the science:

> "Notably, 30% of teachers emphasize that recent global warming "is likely due to natural causes," and 12% do not emphasize human causes (half of whom do not emphasize any explanation and thereby avoid the topic altogether). Of teachers who teach climate change, 31% report sending explicitly contradictory messages, emphasizing both the scientific consensus that recent global warming is due to human activity and that many scientists believe recent increases in temperature are due to natural causes."

Happily, only a small number of teachers reported that they had received pressure from parents or others. But many teachers themselves seemed confused about the science. Only a third of middle-school teachers, and half the high-school teachers were aware of the high degree of consensus among climate scientists that humans are causing climate change; most of the teachers thought there was much more debate among scientists. The teachers themselves had divided and often incorrect views of the science: "although only 2% of teachers personally denied that recent global warming is happening, almost one-sixth (15%) believe that it is mostly driven by natural causes, and another one-sixth thought that human and natural causes are equally important." Part of the problem is that many of the teachers received no exposure to the topic in college, maybe because they graduated before the issue had reached much prominence. Many teachers said they would welcome additional training.

Other studies show that more education doesn't necessarily translate into better knowledge of climate science among conservatives. But young people may have more open minds than their elders. In 2016, the University of Texas Energy Poll found that 62% of those under age 35 support decreasing the use of coal, versus 28% of those over 64, and 52% of millennials support a carbon tax, versus 23% of the older group. Ninety-one percent of millennials believe climate change is occurring. That's good, but it's only a start.

If they are to make informed decisions, not only about policy but about their own lives, millennials need to know more. Today's teenagers are likely to be around in the 2070s and 2080s. Their children will likely live into the next century. By 2070-2100, if society fails to cut emissions effectively, the effects of climate change will be much more severe. It's only fair to give them as much information as possible about the conditions they and their kids can expect to encounter.

Colleges and universities should be on the frontlines of ensuring that science teachers are fully up to speed on climate science. There are many issues where all we can do is provide information and policy advice to others. But educating future teachers is one area where our institutions can themselves take the lead. We should also try to do better in getting our findings before the public and especially before young people, through traditional and digital media. And as academics, we also need to be active in pushing school systems to give the subject more attention and deal with it more accurately.