NOW THAT COURSE CONTENT, classroom discussions, and even entire universities have gone online, many wonder whether face-to-face college education has a future. With unlimited digital information easily available in the public domain, do we still need classrooms and laboratories?

The goal of education has always been to learn how to transform data into information, information into knowledge, and knowledge into wisdom. Because of Google, we are now inundated with data and information—but knowledge, let alone wisdom, remains as scarce as ever. To see why classrooms and laboratories remain essential, we must first grasp the crucial distinction between information and knowledge.

Since Plato, philosophers have defined knowledge as true information that can be understood and proved. To transform information into knowledge, we need a range of intellectual skills, starting with the abilities to distinguish true from false information and to understand what makes true information true. Even if information I acquire happens to be true, if I do not know why it is true, I cannot understand or explain it to others. The same piece of information—available to all—will be knowledge only to some.

Knowledge, in short, is information transformed into understanding by sophisticated academic skills of interpretation, explanation, application, experiment, and evaluation. Even if I were able to watch Albert Einstein lecture online, I would not become knowledgeable about physics unless I could understand, explain, and prove the information he provided. Trying to become knowledgeable by watching an Einstein lecture would be like trying to learn to play tennis by watching Roger Federer. Acquiring knowledge requires supervised practice in the acquisition of complex skills. Students need supervised practice, or “coaching,” to learn fundamental academic skills.

What skills create knowledge? First, exegesis. In a culture of online surfing, my students are surprised to discover that every word of a sentence by Plato is meaningful. Exegesis involves complex skills of grammatical, logical, and rhetorical analysis essential for the practice of law, medicine, business, or scholarship. Second, application. Again, my students are initially taken aback by the invitation to connect Plato to their own lives. Discovering and applying what Plato means to them, to their values and experiences, is the beginning of wisdom. Third, evaluation. What standards are relevant for evaluating the truth of ideas students come across? How does one apply those standards? Evaluation is the most cognitively demanding of all academic skills, which is why those at the pinnacle of their professions spend most of their time evaluating arguments, proposals, and other practitioners.

To have knowledge of a dialogue of Plato, then, means to have acquired the skills necessary to answer these fundamental questions: What did Plato mean by this dialogue? What does this dialogue mean to me? And are the ideas in the dialogue sound or true?

Coaching students requires a personal relationship between expert and novice. Computers can drill us in rote skills, but they can’t teach us to explicate, apply, and evaluate a complex argument. Only another person can exemplify the value of knowledge and show us how to make it our own.

The last major revolution in information technology was the printed book. When cheap books arrived in early sixteenth-century Europe, it no longer made sense for professors to read to their students from their own precious books. Lectures became modes of transmitting not the information contained in a book but the information possessed by the lecturer.

Today, students have easy access not only to printed books but also to printed lectures posted on course websites. And they can watch lectures online, anywhere, anytime. Hence, many instructors are beginning to “flip” their classrooms by having students watch or read lectures at home and using precious classroom time for coaching. I have my students draft essays in class collaboratively, debate controversial questions, and discuss their responses to the readings.

There are many proposals for replacing college instructors with online instruction but none for replacing college coaches with online instruction. This discrepancy reflects a widespread misunderstanding of academic learning. Students deserve the same face-to-face engagement and supervision in our classrooms as they enjoy on our playing fields. Professors must become academic coaches—and classrooms places of intellectual scrimmage—if they hope to survive in the new digital age.

JAMES BERNARD MURPHY is professor of government at Dartmouth College. Academe accepts submissions to this column. Write to academe@aaup.org for guidelines. The opinions expressed in Faculty Forum are those of the author and do not necessarily represent the policies of the AAUP.