In Defense of Real Education

RUSS ROBERTS

Which college professors do you remember most vividly and with the most respect? I suspect many of us think back to the best lecturers—the ones who captivated us and entertained us while sharing their expertise. I have nothing against charisma or a compelling lecture. But what I think of as real education goes way beyond a great scholar sharing insights in an entertaining fashion.

UCLA econometrician Ed Leamer shared a story with me when I interviewed him for my podcast, EconTalk, that captures for me the essence of real education and great teaching. A young aspiring economist comes to him from China for a summer of instruction. At their first meeting, he hands her a book, tells her to read it and to come back for their next meeting prepared to discuss it. She reads the book. He asks her questions. They discuss the book at their next meeting.

At the end of that meeting, he gives her some data. Study it, he says. We’ll talk about it next time. When she returns, he asks her what she learned from the data and pushes her to defend her claims. The rest of the summer proceeds along these lines. There’s no lecturing. He gives her things to think about, and they discuss them. At the end of the summer, the young economist sends Leamer an email. She tells him that she had been at Santa Monica pier and there she had seen a father teaching his son to fish. Rather than having the son watch the father and learn to imitate him, the father let the son hold the fishing rod. The son did the best he could and the father

Russ Roberts is the president of Shalem College in Jerusalem, Israel, and the John and Jean De Nault Research Fellow at Stanford University’s Hoover Institution. He is the founder and host of the weekly podcast EconTalk: Conversations for the Curious. His latest book is Wild Problems: A Guide to the Decisions That Define Us.
commented here and there. You, the student wrote Leamer, are the first teacher I’ve
known who lets me hold the fishing rod.

There’s a temptation to criticize the father at the pier or Ed Leamer, the teacher,
for being lazy. You didn’t do any teaching, Ed! All you did was tell her to read some
stuff and ask her some questions. You know so much more than she does. Why waste
her time letting her make mistakes misinterpreting the data and misunderstanding
the articles you made her read? You could have taught her so much more. Surely it
was tempting for the father or the teacher to say, hey—give me that fishing rod and
let me show you how to do it right!

Leamer certainly could have told his student so much more than he did. But
only by holding the fishing rod and making mistakes and losing a fish now and then
can the student actually learn. Listening and learning are related. But they’re not the
same thing.

Once you’ve gone to graduate school and taught a course a few times, you
often know not just the right answers to good questions but the wrong answers that
students inevitably make in grasping new material. It’s so tempting to just tell them
the truth, let them write it down, and test them on it later. The problem is that if you
teach that way, you may get some students who score well on exams. And if you are
a sufficiently entertaining lecturer, you may get high scores from your students on
course evaluations. But your impact on your students will be limited.

Plutarch said it best—the brain is not a vessel to be filled, but a fire to be
kindled. This was true even in Plutarch’s time, which did not have Wikipedia. Without
Wikipedia and without Google, there is some value to filling the vessel—to sharing
knowledge in hopes that it will be retained. But real education—the ability to read
thoughtfully, the ability to think, the ability to synthesize, the ability to ask deep ques-
tions, the ability to grapple with questions that don’t have simple answers, the ability
to appreciate when an answer is not just wrong but poorly defended—acquiring these
skills requires something more than the passing on of knowledge or even insight. It
requires letting the student hold the fishing rod.

When I defend teaching that is more of an exploration than a lecture, teachers and
students often mistake this for allowing more class discussion. Great teaching surely
requires discussion, but it is a guided discussion, not merely making sure that students
have a chance to share their opinions about a text or a topic. It is a discussion in which
a student engages with things that have been said before rather than taking his or her
turn to hold forth on the topic being discussed. Discussion as a way to keep students
engaged can indeed be a waste of time. The key is figuring out which questions to ask
that do more than engage students by giving them a chance to talk—the key is asking
questions that force students to think and thus guide them toward understanding. The
key is having students engage with the ideas of the other students.

At the other extreme from lecturing at the students is letting them figure out
everything for themselves. This is a form of letting the student hold the fishing rod, but
it also falls short of providing real education. The sweet spot is somewhere in between.
This past fall our dean of faculty at Shalem College (where I’m the president), Leon Kass, led a colloquium where faculty members shared favorite texts and taught them to the group. One of our faculty, an award-winning novelist, Assaf Inbari, taught a poem by Yeats:

*After Long Silence* by William Butler Yeats

Speech after long silence; it is right,
All other lovers being estranged or dead,
Unfriendly lamplight hid under its shade,
The curtains drawn upon unfriendly night,
That we descant and yet again descant
Upon the supreme theme of Art and Song:

Bodily decrepitude is wisdom; young

We loved each other and were ignorant.

Eight lines. I read it twice, three times before the meeting. I couldn’t figure it out. It said nothing to me. I was puzzled why Inbari had chosen such an unexciting poem when there were so many other great poems by Yeats.

Inbari began by asking us what we thought of the poem. No one had anything good to say about it. Its meaning was opaque. The rhythms irregular, unsatisfying. One member of the group suggested that if it had been written by someone else, it might never have been published.

I’m pretty sure that Inbari knew more about Yeats and more about that poem than any of the dozen or so faculty members in the room, coming from a variety of fields. At that point he could have told us what the poem meant or at least one interpretation to take seriously. He could have unlocked its secrets. He could have told us about when Yeats wrote it and how the message of the poem was related to what Yeats was experiencing in his life at that time.

He chose not to. He let us hold the fishing rod. But not by having us thrash around in ignorance trying to figure out what the poem meant.

Instead, he asked a series of questions that we discussed in turn. What kind of words did Yeats choose for the poem? Long or short? Did any words repeat? Is the narrator of the poem old or young? How do you know? Is there a rhythm in the poem? If it is uneven, and not just the result of carelessness as some of the participants speculated, what might justify the irregularity? What is the “supreme theme of Art and Song” that Yeats references? We struggled with that but made some progress. Did we agree with Yeats about that being the supreme theme? How does knowledge gained from life compare to knowledge gained by studying?
Question after question that we tried to answer among ourselves, sometimes agreeing because someone saw something we didn’t see. Sometimes disagreeing and having to defend our claim to the others at the table. And then finally, as meaning started to emerge from the darkness, we focused on that peculiar word, “descant,” near the middle of the poem that is repeated. None of us knew the word. Google was strangely unhelpful.

At this point, Inbari gave us one piece of knowledge—his interpretation of the word and why he thought Yeats had chosen it.

Had he told us what “descant” meant in his view at the beginning of the class, it would have helped not at all. But coming near the end, after all the questions that we had grappled with and struggled to answer, the fire was kindled and the light came. Suddenly a rich vista opened up and the landscape of the poem was illuminated. We didn’t all agree. We saw it in different shades. But we all owned it. Inbari had let us own it by letting us struggle. It was one of the finest performances by a teacher that I have ever seen. But on the surface, he did little or nothing. It appeared that we did all the work. But he had prepped that work for us through his questions, his single intervention defining the term “descant,” and by refusing to take the fishing rod into his own hands. It was a masterful performance.

That kind of teaching is certainly the goal at Shalem College here in Jerusalem. We may not succeed in every session. But we know what the goal is. It’s not easy. It requires the teacher to step aside more often than our egos would prefer. We know so much, those of us at the front of the classroom. We have so much to share. We want to shine. But the goal is not to show how much we have to share. It’s to kindle the fire. The goal is to learn from the text not about it. The goal for the teacher is merely to be the best student in the room alongside the less experienced ones.

I asked a student of ours at Shalem why he chose us over other Israeli colleges. He said he had sat in on some classes at a prominent alternative and it felt like YouTube. You can learn a lot from YouTube. And of course a great lecturer who speaks at the students rather than exploring the text alongside them, can also kindle a fire. But it’s a different kind of kindling, especially the aftermath, the staying power of whatever has been set alight. As the host of a podcast where almost all the episodes are one-on-one interviews, I marvel at the power and receptivity of the human brain to conversation. Sometimes, my goal as interviewer is to ask the questions I think listeners would ask, in order to let their brains experience learning the way it was meant to be.

What I am calling real education seems like a good fit for reading Homer, say. Or Plato. But the framework need not be restricted to the humanities. Google “Confessions of a Converted Lecturer Eric Mazur.” Mazur was an award-winning teacher at Harvard in physics, teaching the subject to pre-med students who gave him very high marks on course evaluations for his brilliant lectures. As he describes in the video, there came a chilling moment when he realized that the lecture method he was using is—quoting an unknown wag of the past—a process whereby the lecture
notes of the instructor get transferred into the notebooks of the students without passing through the brains of either. He began to worry about what he was actually achieving beyond high marks in his course evaluations. When he tried to measure the impact of his teaching, he discovered that the ability of the students to apply anything he had taught them was quite limited.

He developed a way to bring exploration and ownership of the material into the classroom, even in a large lecture hall. He would ask a problem and give the students a set of answers. He would have them vote on the right answer. If there was significant disagreement, he would tell the students to find someone sitting near them who disagreed with them and see if they could convince each other of why they were right. This one-on-one engagement is, of course, a form of conversation—sparring, challenging, defending, and as Mazur discovered, it is much more effective at creating understanding compared to being told what the right answer is. It is another way of letting the students learn to fish intellectually on their own.

My best learning as a graduate student in economics didn’t take place in the classroom but rather in my study group for a course where five of us would struggle to come up with ways of thinking about questions that had no simple answer but in which the application of economics brought clarity. Why is women’s dry cleaning more expensive than men’s? Why is it sometimes cheaper to rent a car than a bicycle for a day? Why aren’t potato chip packages filled to the top? Who benefits from a price control on bread? How about a price control on apartments? And so on. Putting forth an answer, defending it, and often coming to see that what you thought you knew couldn’t be defended, and then changing your mind. This technique of back-and-forth created learning, learning that persisted and could be applied to new problems and examples.

Fishing is not exactly the right metaphor. It’s more like intellectual wrestling. Which is why we “grapple” with a hard question—we wrestle with the question itself, and in conversation with another wrestler, insight can emerge as we seek understanding. This metaphor makes it clear that real education is hard work, much harder than taking thorough notes and preparing for an exam that is easy to grade in a large lecture class.

I wish I could believe that these examples of real education are the future. Alas, they are mostly in the past and thrive quietly only in a handful of places. Why is that?

One reason is that real education is expensive. It requires learning to take place face-to-face in small groups. On the other hand, it is cheap, in theory. You don’t need the teacher to be a great scholar but instead, a great guide. A different skill that in theory is much cheaper to purchase in the marketplace.

I think the real problem at least in most universities is that the educational process is not designed for learning but for teaching, and they are not the same thing. Students want a credential. The value of the kind of learning that takes place in a small seminar is less tangible. I am often asked about the education we provide at Shalem College. My answer is that our students learn to think, to read, to write, to
ask questions, and perhaps the rarest skills of all—to listen and to think in concert with their peers via conversation. Yes, but what is it good for, people sometimes ask me. They want to know what occupation it leads to. Sure these skills are nice, they are saying, but they don’t help you read a balance sheet, do a root canal, represent someone in court, or create an app for a smart phone. I patiently explain that these skills are fine, but almost every employer likes people who can think, and the proof is in the marketplace—our graduates from Shalem College here in Israel thrive in the job market when they leave. But many students understandably prefer the comfort of the focused degree—law, engineering, and so on.

STEM is all the rage, everywhere. But not everyone can be an engineer or a coder, or wants to be one. The other challenge with education in the modern world is that in many places, the humanities have given up on their mission to teach thinking, humility, and self-awareness of one’s humanity in a complex world. They have adopted the latest dogmas or they hope to imitate the sciences, a form of flattery that serves the student poorly.

At one point there was a belief that technology would rescue education, driving costs down and dramatically expanding access to the best teachers. Although technology has helped students who have little access to any education and has been useful in providing certain kinds of instruction, its promise has fallen dramatically short of what was hoped for.

Where does that leave us?

When it comes to education, I remain a dreamer and an idealist. I believe there will always be a place for real education for those with the desire and the discipline to take the great books, great ideas, and great questions seriously.

I liken a serious college that provides real education to a craft brewery. It will never have the sales or profits of an Anheuser Busch. Nor do I believe that the world will eventually come around to my view of the rich taste of a craft beer. But craft beers are thriving. Maybe, just maybe, real education can grow. Not enough to dominate the market but enough so that a beer with real flavor is widely available to those thirsty enough for the real thing to demand it.
Subscribe now and receive a free book!

“The Independent Review does not accept pronouncements of government officials nor the conventional wisdom at face value.”
—JOHN R. MACARTHUR, Publisher, Harper’s

“The Independent Review is excellent.”
—GARY BECKER, Nobel Laureate in Economic Sciences

Subscribe to The Independent Review and receive a free book of your choice such as Liberty in Peril: Democracy and Power in American History, by Randall G. Holcombe.

Thought-provoking and educational, The Independent Review is blazing the way toward informed debate. This quarterly journal offers leading-edge insights on today’s most critical issues in economics, healthcare, education, the environment, energy, defense, law, history, political science, philosophy, and sociology.

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!

Order today for more FREE book options

SUBSCRIBE