## **Putting the Right Question First**

And now you ask if I will teach you, when I say that there is no teaching, only recollection.

Plato, Meno (82A)

One little piece of literature, scarcely 30 pages long, includes the most compact formula for the whole process of teaching and learning that I've ever found. It was written in 387 B.C. The piece in Plato's dialogue, *Meno*, which ironically does not even directly deal with teaching and learning, but with virtue. Midway in their discussion of this matter, however, Plato's characters Meno and Socrates are diverted by the issue of the nature of learning. Socrates has advanced the notion that "what we call learning is merely recollection." Naturally Meno asks him to explain this, and Socrates does so with a demonstration so precise that every teacher should read it carefully.

Socrates asks Meno to watch as he questions a servant boy, thus to judge whether he is showing the boy anything actually new or just reminding him of what he knows already. Here we have every major aspect of modern education — the teacher, the pupil and a critical observer — each given the position and respect due him.

First Socrates draws a square in the sand at this feet, and then he asks the boy to identify the figure. The boy so does, and then Socrates asks him how he knows that the figure is a square. Of course the boy recognizes that a square is identified by the conventions of parallel equal sides and right angles, and he likewise affirms that size is immaterial; a square could be of any size, provided it met these criteria.

Having thus set up a common base of knowledge, Socrates begins the process of probing the extent of the boy's related understanding — again with questions: "Now if this side is two feet long, and this the same, how many square feet will the whole be?" The boy correctly answers, "four."

Next comes a question which puts responsibility more directly on the student's shoulders: "Could one draw a figure double this area but still a square?"

"Yes", answers the boy.

"And how long would each of its sides be?"

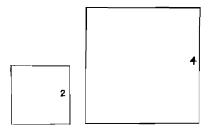
"Each will be double in length, Socrates."

Here, Socrates turns to Meno: "You see, Meno, that I am not telling him anything, merely asking questions. He thinks he knows the length of the side of an eight-square-foot figure, but does he?"

"Of course not."

"Indeed, he thinks it is twice the length of the other. Now watch how he recollects (re-collects) things in their proper order."

Turning again to the boy, Socrates now draws the result of the boy's conclusion in the sand beside the first diagram:



"Does this not give you the figure you describe?"

"Yes, Socrates."

"But does it not contain four squares equal in size to the first?"

"Yes."

"Is four times the same as double?"

Here we have reached a crucial point. By questioning alone, Socrates has determined the limit of the boy's understanding — and allowed him to discover it for himself.

He turns again to Meno:

"Observe, Meno, the stage he has reached. At the beginning he did not know the answer, nor does he know it now. But then he thought he knew it and answered boldly, without doubt. Now he doubts — not only does he not know the answer; now he does not even think he does. Is he not, therefore, in a better position with respect to the true answer?"

"Indeed it would seem so."

And, further, Socrates says: "Do you suppose then that he would have attempted to look for, or learn, what he thought he knew before he was cast into doubt, became aware of his nescience, and felt a desire to know?"

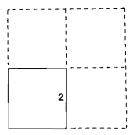
"No indeed."

"Notice, now, that starting this doubt he will discover the right answer, by seeking the truth in company with me, though I ask only questions." Socrates erases the figures and begins with the boy anew, drawing the original square, of two-foot sides.

"Is this not our original square of four square feet, two by two?"

"Yes."

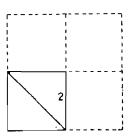
"Can we not add three others of the same size like this?"



"Of course."

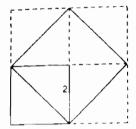
Socrates continues. "Does this line not cut our first square in half?"

(Here, Socrates cuts a diagonal across the first of the squares.)



"Yes."

"And does not each of these likewise cut its square in half?" (He does the same with the adjacent squares.)



"Yes."

"Now how many halves are in this central figure?" (He points to the square contained by the diagonals.)

"Four."

"And how many are four halves?"

"Two."

"Is this not the figure, then, that we have been seeking; one twice the area of the first?"

"Yes, I see that it is, Socrates."

Turning to Meno: "What do you think, Meno, has he answered with any opinions that were not his own?"

"No."

Here the business of teaching and learning is fully exposed. Only now are the correct "opinions" the boy's own. By no lesser means could he have come to "own" them than by first having been led to discover and sublate his erroneous presupposition — having been led to those roots from which all true understanding must spring. For this to have occurred, questions were essential — questions first directed not primarily at the subject matter but at the boy himself.

This, then, is the key to the simplest possible formula for teaching anything: Begin with a question. This question must be directed, whatever its contents, not at the subject of study but at the student, as a challenge. Sincerely and kindly confronted with such a question, few students will disdain an attempt to answer the challenge. And each student's answer will naturally engender, in terms both of the subject matter and the student himself, innumerable other questions until the point is reached where presupposition is undone and honest search can begin.

Few lessons ever get this far. If they did, teaching would be the joyful process it ought always to be ... would it not?

Ron Royer

NOTE: Material in quotations is indirectly paraphrased. It is taken principally from W.K.C. Guthrie, Plato: Protagoras and Meno, Penguin Books, 1956.