THE QUESTION QUESTION

WE LIKE TO GET STUDENT PARTICIPATION IN CLASS, RIGHT? MAKE SURE THEY'RE UNDERSTANDING THE CONCEPTS AND THEORY YOU'RE PRESENTING.

SO LET'S CONSIDER A STUDENT—WE'LL CALL HER LEAH—WHO HATES TO ANSWER. IT'S BORDERLINE PHYSICALLY UPPSETTING TO HER. HOW EFFECTIVE IS CALLING ON HER IN THE COLD—REALLY GOING TO BE?

SO, APPLYING OUR ASSUMPTIONS TO NAVIER-STOKES AND ELIMINATING TERMS, WE'RE LEFT WITH WHAT? ...LEAH?

THIS DOESN'T SEEM LIKE A VERY EFFECTIVE WAY TO GET THIS STUDENT TO PARTICIPATE! AND SHE'S ALMOST CERTAINLY NOT ALONE!
WE STILL WANT THAT PARTICIPATION TO ENSURE REINFORCEMENT OF THE LEARNING, BUT CLEARLY INDIVIDUALLY ADDRESSING STUDENTS CAN BE A BAD SOLUTION TO OUR PROBLEM.

SO WHAT’S THE BEST TECHNIQUE?

THERE ARE A NUMBER OF OPTIONS AVAILABLE, AND ACTIVE LEARNING RANKS PRETTY HIGH. CONSIDER THAT IF INSTEAD OF ASKING ONE INDIVIDUAL STUDENT, YOU SET UP THE QUESTIONING TO ASK THE WHOLE CLASS. GIVE THEM A MINUTE OR SO, ASK THEM TO WORK IN A GROUP OF 2 OR 3, AND LET THEM WORK OUT A SOLUTION TOGETHER.

THEN ASK FOR ANSWERS FROM DIFFERENT GROUPS. ASK MULTIPLE GROUPS IF MORE THAN ONE ANSWER IS POSSIBLE!

SURE, THE STUDENT HERSELF MIGHT NOT BE DIRECTLY ANSWERING, BUT THERE HAS LIKELY BEEN SOME PARTICIPATION IN THAT GROUP, AND THAT WILL HELP TO ENSURE SOME REINFORCEMENT OF THE CONCEPTS AT HAND.

AND THERE ARE SIDE BENEFITS TO THIS APPROACH AS WELL! NOW INSTEAD OF A QUICK SINGLE QUESTION BEFORE MOVING ON WITH THE LECTURE, YOU HAVE INDUCED A CHANGE IN THE CLASSROOM ATMOSPHERE. WHICH IN ITSELF IS NECESSARY THROUGHOUT THE CLASS PERIOD TO MAINTAIN THE HIGHEST LEVEL OF ATTENTION FROM THE CLASS! SO NOT ONLY ARE YOU GETTING THAT ONE UNCOMFORTABLE STUDENT MORE INVOLVED, YOU’VE GOTTEN THE WHOLE CLASS INVOLVED!

SO CONSIDER AN ACTIVE LEARNING APPROACH TO QUESTIONS. IT MIGHT TAKE A LITTLE MORE PREPARATION ON YOUR BEHALF AT THE BEGINNING, BUT WHAT APPROACH ISN’T WORTH IT IF JUST ONE MORE STUDENT LEARNS A BIT MORE?