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From Passive to Active Learning: Helping Students Make the Shift

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From Passive to Active Learning: Helping Students Make the Shift

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Research in learning and motivation advises us as instructors to incorporate more active learning into our classes to improve understanding and long term retention of what is learned (Bransford, Brown, & Cocking, 2000: Greeno, Collins & Resnick, 1996). But it's an awful lot of trouble, and we often meet with resistance from the very students we are trying to help. Why might that be so, and what can we do about it? Addressing those two questions is the purpose of this essay. I'm going to move from theory about motivation and beliefs that might underlie student resistance to active learning to practical suggestions that might counter that resistance.

Speculations on Student Resistance to Active Learning

Students in our classes have advanced in their education by succeeding in their previous classes, either in high school or college. That success was a function of the learning strategies they used, many of which fostered a type of learning that is very different from the kinds of active learning in which we are asking them to engage. In the past, their strategies of listening carefully to what the instructor says and taking notes allowed them to identify what the instructor thinks is important so they could study efficiently and do well on the types of tests they usually had. It's a very logical response on their part to want to stick with what has worked and resist efforts to get them active in class.

The behavior that is being asked of them in the new active learning classes is very different from that described above. What is an appropriate response from students in an active learning class? It's not immediately obvious to them and possibly not obvious to us either. Unless the instructor makes an effort to synthesize the outcomes of the activity, it may be up to the student to figure out what is important enough to write down and then study.

It is also logical for them to want to take a more "received knowledge" approach to their behavior in class because of their beliefs about what constitutes learning and their role in it. If they have not accepted the idea that knowledge is something they must construct for themselves rather than receive from an authority, they are going to be impatient with us for not telling them the right answer and making them instead listen to equally uninformed peers. There are plenty of faculty who would agree with that stance. What neither group understands is that the learning the students do for themselves makes the difference and lasts beyond the test. This is the basis of the constructivist theory of learning which is making great inroads into learning science.

Constructivist theory asserts that learners "construct" and "reconstruct" their understanding of the world as they interact with it. Long-term memory categories (called schemas) are modified to incorporate new information, and incoming information is modified to fit into the existing categories. For information to stick, this reciprocal process must occur at the level of the individual since each person's experiences and schemas will be slightly different. A learner can memorize another person's schemas, such as those of the instructor; but unless that new information is held up to and built into the learner's existing schemas, the learning is very superficial and likely to be inert or unavailable for future use.

How does this view of learning conflict with students' traditional views of teaching and learning? Their task in elementary and high school was frequently to remember what they were told (or had read) and give it back in a fairly unmodified form on tests. This perspective is often accompanied by a dualist view of the world: statements are

either right or wrong, and the authority knows which is which. This model of student thinking was proposed by William Perry based on his studies of Harvard undergraduates (1970). Perry proposed that, when students enter college, they tend to believe they should listen to the instructor and remember what is said. This view is often reinforced by their experiences in introductory classes, where the goal is to convey a large body of new information. As a result, the study strategies that helped them remember information in high school still often work in college, at least in their first few courses. When we ask them to engage in a more complex, self-directed, self-regulated approach that requires interpretation and analysis, we are going against their very belief about what constitutes learning.

Indeed, we are asking students to take risks with new learning strategies that they may have never used before. We are placing them in a vulnerable position in that their perceptions of their understanding are being challenged by the learning activities which we are asking them to perform. Psychology has a lot to say about the "illusion of understanding" that novices experience when they listen to experts describe things (Bransford et al., 2000). Everything sounds clear and understandable until they have to apply the very same ideas themselves. At that point the certainty they had is often shattered. One would think that students would like to have that feedback during class while there is still time to question the instructor and clear up misunderstandings. However, from the students' perspectives, active learning puts them in the uncomfortable position of realizing they don't understand. It's only normal to want to feel in control and to avoid feeling confused, and so students initially prefer the comfortable illusion to the uncomfortable reality.

Of course, some of the student resistance to active learning stems from a desire to minimize effort. Some might call it laziness; I would call it strategic effort. Students have many pressures on them, especially new students who are learning the institutional ropes as well as new content and now new learning skills. Is it any wonder that they would want to stick with what works rather than gambling on an unproven learning method?

What Can We Do?

The unfamiliarity and unknown quantity of new methods. As instructors we must recognize that the value of active learning may not be obvious to the students. And research on behavioral change asserts that unless the individuals see the value and benefit of new ideas, they are not likely to abandon old ones (Eccles & Wigfield, 2002; Pintrich, Marx, & Boyle, 1993). Therefore, when new active learning methods are being introduced, it is worth taking some time in class to explain to the students why we are asking them to participate more actively and learn more intentionally than they have in the past. We should explain how these activities are related to their ultimate goal of success in the course; and we should be sure that the activities are indeed a reflection of the course objectives, not just something to do. Active learning means active engagement with the content, not just being active. Careful design or selection of the kinds of activities that we ask the students to do is extremely important in winning them over to the active side.

There's only one answer. To overcome their belief that there is one right answer to every problem, we need to expose them to increasingly complex situations across the semester and model how we could approach problems from a variety of perspectives and still create a reasonable answer to a question. It is important to introduce the students to these complex problems in a low stakes situation before making these decisions part of their grade. When using more complex problems, there should be sufficient modeling of the process or explanation of the behavior so students can feel comfortable with the ambiguity and conflict that might arise.

Learning is risky business. This last assertion points to the heart of the matter. When we ask students to be active learners in a class, we're asking them to take new risks. We're asking them to give up tried and true learning strategies for a new, initially more challenging approach. We're asking them to run the risk of failure. That's a lot to ask of students who tend to fear failing. If we're going to ask this of them, we have to make the classroom a safe place where failure is just another chance to learn. We can convey this in how we deal with their responses during active learning. We support their effort, if not their output. We can also model what it means to be an active learner, including the willingness to make mistakes. How we handle

the situation will influence the manner in which they handle the situation.

Conclusion

Active engagement creates the opportunity for deeper learning, but it can also create anxiety. Student resistance is logical, but we can break it down slowly and gradually by making the classroom a place to learn and not a place to be judged.

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