A Method – Team Based Learning – to Teach Non-economists Economics-based Policy Analysis

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Ideally, learning occurs in a class when concepts are mastered, and then applied to solve problems. But, too often learning is stunted because of poor preparation on the part of the students. Professors faced with high failure rates and disgruntled students settle for re-teaching the material the students could have read in the text, and composing tests that only capture the students' ability to memorize answers without any real understanding. I will present my own path to a method, Team Based Learning, which has allowed me to create a classroom where students come to class prepared to solve interesting and important policy-driven problems.

When first confronted with the problem in a large undergraduate statistics class, I came up with a number of labor intensive solutions which essentially coerced students to "do what good students do" (read the book, come to class, do the problem sets.) The next time I was faced with a similar problem at a different university in a class on economics-based policy analysis, I did not have the same resources (ie. graduate assistants) to throw at the problem. I felt that I was being forced to make a choice between dumbing down my classes or accepting a lifetime of "below average" teaching evaluations.

Together with teaching consultant Bill Roberson I came to several conclusions. 1) My students were seeing the course as an abstract, unnecessarily difficult, academic exercise rather than as a concrete opportunity to act in ways that mattered to them. 2) The difficulty of the course content was not really the problem. The way in which students experienced the content was more important for student engagement than the nature of the content itself. 3) My students would never be able to achieve my demanding intellectual goals unless I found ways to ensure their preparation for class.

The consultant recommended a book on Team-based Learning, which was developed by Professor of Organizational Psychology Larry Michaelsen to deal with large class sizes in a business school. I was suspicious of the title, in part because of the emphasis on teams. Yet, I was reassured when I read that that goal was to move from asking the students to memorize content to asking them to use that content to make concrete decisions.

Rather than coercing students to "do what good students do" TBL structures student work around specific, visible, concrete, public decisions. The quality of those decisions depends on how well students have processed course content. Reading and studying are no longer empty behaviors or abstract exercises: they are a means to an immediate end. A permanent team structure gives students time to learn to make decisions together, an essential condition for requiring them to perform at higher cognitive levels. The main driver of the method is frequent, immediate feedback on everything students decide—whether as individuals or in teams.

A Team-Based Learning course will have 4-7 instructional units. For each unit, here is the sequence over 2-4 class meetings:

1) A substantial reading assignment (outside of class)

- 2) Readiness Assurance Process to assess basic student grasp of main ideas (in class)
- 3) Clarification of lingering confusion (in class)
- 4) Team applications using the material to delve more deeply into complex ideas (in class)
- 5) Assessment of learning (individual and/or team assignments) (in or outside of class)
- 6) Debrief/summary (in class)

The Role of Readiness Assurance

The Readiness Assurance Process (RAP) is the first step in team development. Early in each unit students take an individual, multiple-choice, Readiness Assessment Test (RAT) to measure their understanding of the assigned content. Immediately afterward the Team takes the same test for a team score using a scratch off sheet that provides instantaneous feedback on the correct answer. Both components factor into students' grades. The RATs ensure that students get immediate feedback on their initial understanding, to correct any errors. This process has a double psychological function. First, the Individual RAT ensures that students do not use their teams to cover over individual failure to prepare. Second, the Team RAT requires the team to practice its decision-making from the very beginning of the course.

This approach, which I will describe in more detail during the seminar, has proven very successful. Students who before never read the material self-reported that they were spending more than 5 hours a week outside of class, against a campus undergraduate average of 2-3. The RAP provided incentives for students to prepare and the Team RAT especially helped them deepen their understanding of important concepts. Once the students got the basic concepts, they moved into advanced discussions and could read more challenging articles. The difficult content was no longer a stumbling block:

I have used the approach to teach in courses involving both statistics and microeconomics. In the microeconomics class, I got non-economics majors to read and understand academic papers by economists. Best of all, they got excited about it. The first half of the course concentrated on illegal markets and the second half focused on organized crime. By the end of the course most of the students were able to apply the concepts of microeconomics to drug markets (drug legalization) and the mafia in astute and creative ways.

Is it really possible that your students are all that unmotivated and unwilling to learn? It turns out that my students are highly motivated. I had no idea how engaged and willing they could be. The choice between dumbing down the course and accepting bad teaching evaluations was a false choice. My courses are harder now than they were before and, I am getting consistently high teaching evaluations. Teaching is fun – and productive.

For more information visit the TBL website at http://www.teambasedlearning.org.

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Perry, W. G., Jr. (1970). Forms of Intellectual and Ethical Development in the College Years: A Scheme. New York, NY: Holt, Rinehart, and Winston.