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Delivery Methods to Increase Student Engagement and Student Learning in Principles of Macroeconomics

The level/intensity and frequency of class activities an instructor chooses to adopt in the classroom, so as to be able to keep student attention and engagement for the entire duration of the class - some studies have shown that student attention drops as early as after the first 18 minutes - and its impact on student learning is the relationship we aim to investigate in this paper.

We will compare two courses of Principles of Macroeconomics, a university core curriculum course offered at Jacksonville University, in the Fall 2013 and Spring 2014. The level, intensity and frequency of classroom activities that require students to be engaged in a meaningful way will significantly increase in the two courses offered in the Spring 2014.

Student learning will be captured via several evaluation categories including, but not limited to: exams, quizzes, in-class assignments, and homework assignments. To control for other variables besides the increased level, intensity and frequency of in-class activities, which affect student learning, we will gather data on students GPA prior to fall 2013 and spring 2014, as well as other control variables to be determined at a later time. To control for different teaching styles, other than the increase in level, intensity and frequency of in-class activities, the all four courses will be taught by same instructor.

One outcome of this study will be the creation of an activity workbook framework for faculty to utilize in their teaching of Principles of Macroeconomics.

We will try to differentiate between two kinds of faculty-student engagement: emotional engagement, and content engagement, as well as the combined effect of the two.

Hypothesis 1: Emotional engagement - non-content specific - is a necessary condition for the content engagement.

Hypothesis 2: The combined effect of emotional engagement and content engagement “adds value” to student learning in addition to accounting for the emotional engagement and content engagement separately.

Background

To engage students in content specific discussions in an ongoing way the instructor has to relate to the students constantly, connect with both their current level of knowledge in the subject matter, as well as emotionally, in ways meaningful to them. The engagement is a process in which the faculty and student(s) come together to exchange, share and discover before they learning takes place, including instructor’s learning.

The instructor has to reach out to the student(s) and the student tries to reach out to the instructor, a process that takes several weeks, before each side develops beliefs and expectations about the other’s side actions and level of effort to reach out to the other side. Meeting the other side *somewhere in the middle* of the engagement spectrum, where both the instructor and student(s) move away from their comfort zone (an individualistic approach) by putting effort and showing commitment is a process that lasts all semester long. But the position each party decides to take in the spectrum varies both over time, and across different subjects/classes, or topics within each class.

An important part of the engagement process is a well planned and executed in-class activity, which focuses on getting students to think (sometimes critically) about using prior knowledge (often not course-based) to answer course-specific questions. The goal of such in-class activities is that with some level of effort, students will naturally "get it", they will understand the topic as an organic part of doing the activity, as opposed to memorization or other mechanical learning methods – similar to Rosetta Stone’s claimed method. After all economics terminology is a foreign language for most college students.

However several challenges make engagement difficult for both the students and faculty. Students who do not have a prior level of knowledge of the subject matter, regardless of the effort made, will not “get it”. Students who take abstract-thinking courses in economics (with assumptions like “all else equal”), with little or no background in abstract model building, cannot “relate” to the subject matter in a meaningful way, especially in a continuous mode (for more than 2-3 weeks).

What may act as a break on student engagement is also the limited amount of time the average college student has nowadays to study for any of their core curriculum courses, most of them not subjects the student can easily relate to. Taking 5-6 courses a semester, having a part-time job, or playing in a college sport team, limits the actual time a student has to acquire new course-based knowledge, which is necessary for further and continued engagement in the course. This makes it even more imperative that the instructor uses class time effectively to both actively engage students and motivate them to do any homework, in face of high opportunity costs of spending the limited time in doing more than their basic/standard homework.

Course Delivery

In a 50 min class the instructor can aim at consistently adopting the following basic approach and have two or three modified ones.

Basic approach: for the first 20 minutes the instructor engages in a guided discussion/summary of key concepts, formulas and reasoning, sporadically asking students simple questions, to make sure they are following and to encourage them to ask questions for clarification. In the next 20 minutes students work on an engaging in class activity (which could have been available to them in an activity workbook) which incorporates both use of material just covered, as well as open ended questions inviting them to express their opinion or offer a critique. The last 10 minutes can be used for reflections and discussions, summarizing key points, and giving reminders for next class.

Option 1: The flipped classroom - students were exposed to theoretical material in previous class with minor discussions. In the next class students will be holding all the discussions based on an assignment (possibly from a workbook) containing several questions, for which students need to prepare and assumed a leadership role.

Option 2: Instructor starts the class with an activity from the previous class theoretical topics, followed by 10 min reflection, and the rest of time (10-20 min) the instructor starts the discussion of either old material (on which students did a less challenging activity), or the discussion of new material.

The most important thing is to continue to keep students engaged, by first creating a safe environment for them to feel comfortable to express their thoughts, being friendly, funny and entertaining at times (less serious), and ultimately be the trusted source for the knowledge of the subject matter and communicate it in a way that they see value in learning what the instructor knows, and also learning from other sources the instructor makes available to students throughout the course, as well as ultimately becoming independent learners via their own research process.

Part of staying engaged from the student’s perspective is also knowing what to expect from each class, from the course and the instructor. Sometimes this expectation might consist in knowing that there will be a surprise/different/unplanned component in a particular day. Thus a clearly planned and detailed list of activities broken down in each 10 min increments, might not be necessary, and too much structure will clearly add unnecessary pressure to the instructor to follow the plan, and not allow for a more natural flow in the process of teaching and learning.