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RED LIGHT, GREEN LIGHT AND OTHER IDEAS FOR CLASS PARTICIPATION-INTENSIVE COURSES

In this article I share a multi-stage technique that I have developed to facilitate participation in classroom discussion. After describing the basic process, which includes preparatory pre-class essays, small group meetings, multi-colored name cards, and integrative post-class essays, I offer some additional insights and suggestions concerning the pedagogy's use.

Class participation: The promise and the problems

Nothing is so well learned as that which is discovered.
- Socrates

An ancient Chinese proverb states: "I hear and I forget, I see and I remember, I do and I understand." As this proverb suggests, there are important advantages to more experientially intensive modes of learning. One such approach is class participation. Led by such exemplars as Roland Christensen of *Harvard Business School* (Christensen, Barnes & Hansen, 1987), many business schools rely on class participation as a key learning tool.

However, class participation as a learning pedagogy is not without its problems. At times students fail to adequately prepare for class; in the extreme some students fail to prepare at all. Conversely, other students are well prepared, but are frustrated by their inability to communicate their readiness to the instructor. Conversely, instructors may unintentionally embarrass students whom they unexpectedly cold call, making the atmosphere all the more stressful for others present. Compounding the situation are students who essentially free ride on other students' comments, leading to lingering resentments lasting long after the term is over.

Assessing classroom performance gives way to another set of dilemmas. For example, how should participation grades be assigned for students who appear prepared, but fail to take any initiative to enter the discussion? Likewise, participation-intensive classes all too often turn into high-pressure environments where students fight to get their share of "air time". However, does air time correlate with learning? Just as the pedagogy of the lecture can result in data dumping on the final exams, so too, the pedagogy of class participation can encourage data dumping, albeit in a different manner.

Therefore, attempting to facilitate "understanding by doing" is not a problem-free pedagogy. Whether it be lack of pre-class preparation by students or difficulties in facilitating in-class contributions, instructors seeking to utilize participation-based learning face a daunting set of problems. Can anything be done about them? To date the solutions appear relatively limited. Haynes and Helms (1993) addressed the issue of engagement with their multi-stage participation structure. Their approach begins with structured small-group discussion and builds toward student-structured teaching. However, their technique does not address either the free-rider problem or the grading dilemma, to name but two. Conversely, Taylor (1992) offered insights on how to build bridges for participation by involving students in critiquing the course's learning contract, goals and objectives. This approach also advocates increasing participation by involving students in inventorying the learning resources available and in developing novel acquaintance exercises. However, this effort also falls short of resolving the problems identified earlier.

RED LIGHT, GREEN LIGHT AND OTHER IDEAS: A PROCESS APPROACH

The art of teaching is the art of assisting discovery.
- Mark Van Doren

In this article I seek to share a pedagogical technique that has emerged from my own experience in teaching participation-intensive courses. The approach involves five basic steps:

1) preparation of a one page pre-class essay,
2) attendance at a short pre-class small group meeting,
3) selection of one of three appropriately colored name cards,
4) participation in the classroom discussion, and
5) an integrative post-class essay.

I typically outline the process in detail for students in the course syllabus (the main headings included in that description are included in Appendix 1; interested readers may contact the author for a full text version).

What follows is a review of the sequential stages involved in the process. I then conclude by offering some additional thoughts concerning use of this approach. However, before launching into the five steps, I need to mention that this approach requires substantial set-up work on the part of the instructor. Insofar as the approach seeks to simultaneously encourage divergent and convergent modes of learning -- *convergent* learning through use of a common case study, and *divergent* learning by having students look at one of three supplemental readings selected to highlight specific elements of the case study -- it may require significantly more time than other approaches (an example of assigned materials for a representative class are found in Appendix 2).

Step 1 - Individual Pre-Class Participation

Students are required to prepare a short (one-page maximum) essay on one of three pre-class study questions assigned by the instructor. The questions are included in the course outline (see Appendix 2 for a set of assigned core and supplemental readings for a sample class session) and require each student to read a case study (common for all students in the class) and one of three assigned supplemental readings. Students are required to deliver a hard copy of their essays to my office no less that 45 minutes before the particular class session. The 45 minute lead time is for my benefit, for it allows me time to review the essays. While I recognize the benefits of email, I typically require students to deliver hard copies to my office in order to minimize printing-related delays. Some days, I review virtually all of the essays; however, on most days I review only a selection. What I look for when reviewing the essays are key quotable phrases, sentences and paragraphs that might spark provocative interaction. However, while I seek to encourage students' involvement, in the form of public citation, they always retain the right to veto a public reading of their work.

Step 2 - Group Pre-Class Participation

Building on the insights of Erskine and Leenders (1981), I require that students hold a 15-to-20 minute meeting before each class session. The primary purpose of the meeting is to facilitate comparison of first reactions to the core case study. The group meetings also serve several other functions. First, they aid students in "warming up" for the class to follow. Second, they allow students to get some advance sense of the supplemental readings studied by other group members and thereby get some sense of what the readings imply for the core case. A final reason is to facilitate the formation of work groups for the course's major group project.

Step 3 - Intro-Class Participation

On the first day of class I provide each student with three name cards for their use in the ensuing class sessions -- one red, one yellow, and one green. The three different colors are essentially for the student's use in signaling their readiness to participate. Drawing on a traffic light metaphor, red name cards are to be used if the student does not wish to be called upon by the instructor under any conditions, yellow name cards are to used if the student welcomes non-in-depth interrogation by the instructor and green name cards are to be used if the student invites unrestricted in-depth interrogation by the instructor. As students enter the second and each ensuing class period I require that each one display either a red, green or yellow name card. In the interests of recording the color of the name cards, students are not allowed to switch colors once the class has begun.

Step 4 - Intra-Class Participation

Having written their one-page preparatory essay, met with their small group to preview the day's materials and selected their name card color, the students have done their part to set the stage for the day's discussion. Having reviewed the students' pre-class essays and observed the color of their respective name card, I am also ready to lead the class. Often, after either asking for a volunteer or calling on a student displaying either a green or yellow name card to open up the case, I introduce one of the supplemental readings by reading short extracts from one or two essays and the asking then writer(s) to comment further.

What I find particularly attractive about this mode of engagement is that it gives both instructor and student a baseline to work from. From the student's perspective, this form of encounter has at least two distinctive benefits. First, it allows students to demonstrate that they have studied the material, as evidenced by their written documentation. Second, by selecting the color of their name card they maintain some degree of control over the risk faced during the class. From the instructor's perspective, there are also corresponding benefits. First, by reviewing the class essays the instructor is provided with some valuable "grist for the mill" of discussion. Second, by observing the colors of the students' name cards, the instructor is provided with information of who is prepared to participate in either a coarse-grained (yellow name card) or fine-grained (green card) grinding of the grist. The instructor is also given an unambiguous signal (red card) as to who prefers not to participate at all in the grinding.

Step 5 - Post-Class Participation

One of the most important tasks facing the educator is that of facilitating integration of the material studied. As I mentioned at the outset of this article, this challenge also surfaces in use of the class discussion pedagogy as all too often students finish off one case and then quickly move on to the next. In recognition of this problem, I require students to reflect on the classroom experience once each week and generate a single-page, post-class essay. My rationale is simple; listening is a fundamentally important skill that is both essential to managerial effectiveness and difficult to assess except by tangible codification of what was heard. In explaining my rationale for the essays, I also highlight their value as it concerns preparation of the course's final assignment[2]. By scanning the essays, the students can quickly review some of the most important issues raised during the course. Like the pre-class essays, the post-class essays are limited to one page in length and must be delivered to me no less than 45 minutes before the next class session. What I typically do is review several in the 45 minutes before class, looking for well-stated encapsulations that can be shared with the class in the first 10-15 minutes of the ensuing class.

DISCUSSION: LESSONS LEARNED ALONG THE WAY

In teaching it is the method and not the content that is the message...the drawing out, not the pumping in.

-Ashley Montagu

This approach emerged gradually with me needing to learn several important lessons en route. Following the sequential nature of the process, I present several of these lessons. However, I first offer some general thoughts on introducing the process to the class.

Introducing the process: The first day of class

I begin my courses by handing out the course syllabi and asking students to read the sections related to the course objectives and class participation process. As they read the outline, I pass around green, yellow, and red name cards together with thick-tipped black felt pens. As they receive the colored paper and felt pens I ask them to take a few moments aside from reading the course outline and write their first name and last initial across each of the three colored name cards and then display one of the three cards in front of them. In a class of 35 students I typically allow approximately 25 minutes for these two activities, after which I review the course outline, beginning with the basic course objectives, required text materials, and classroom process. Given that this approach is reasonably novel for many of the students, I pause at each of the steps to field students' questions.

Concerning pre- and post-class essays

I have found that the key to making these assignments work for both student and teacher is to not make them overly demanding. From the students' perspective this means keeping the exercise down to a one-page maximum. From the instructor's side, this means utilizing an appropriately coarse-grained grading scheme (as a class of 40 students each preparing 12 pre- and 12 post-class essays create over 1,000 additional potential grading points). What I have typically done is to simply grade on a pass/fail basis. Failing grades are a comparatively rare occurrence and only given for exceedingly superficial efforts.

Given the concomitant use of post-class synthesis essays, I recommend that students be required to complete no more than one pre- and one post-class essay each week. Taken together, the two assignments permit the students to demonstrate that they have studied the assigned material in advance of class, and actively listened to what was said in response to that same material during the class, no less than once each week. For practical purposes, the pre- and post-class essays can be completed on the same class session; in actual practice I permit the student to select either the same or different class sessions. I also offer one small operational recommendation: in the interests of rapid sorting, I have found it very helpful to have students left- justify the headings of all pre-class heading and right-justify the headings of post-class essays.

[2] My courses typically require students to complete a major end-of-term integrative project that necessitates a synoptic review of all materials studied.

Concerning pre-class group meetings

I rarely attend the pre-class group meetings in person. Part of the reason is that I find my presence fundamentally skews the dynamics of inter-student discussion. If they wish to invite me to the group's meeting, I am prepared to consider attending. However, my priority is for the small group experience to remain as student-intensive as possible. In order to assist the students in tabulating their attendance at the meetings, I provide a record sheet that can be used to record the meeting dates and attendance.

Intro-class participation: On recording name card color

One of the first things I do at the beginning of each class is ask for a volunteer to mark participation that day. "Marking participation" involves two activities: first, circling the color of the name cards displayed, and second, recording a check mark for each entry into the class discussion. This technique requires that the standard seating chart be modified to also include a "G" (for green), "Y" (yellow) and "R" (red) in each student's square. The inclusion of the three letters allows the marker to record presence and readiness by simply circling one of three letters in the individual's box. As the class discussion proceeds, the marker is responsible to use her best judgment in recording one check mark for each entry into the discussion. One of the recurring problems I encounter arises from students forgetting their name cards. There are two basic solutions: first, to penalize the student by not recording any name tag color; or, conversely, to have the individual inform both me and marker of their preferred name card color.

Intra-class participation

My objective is to create as positive a learning experience as possible. To that end, I seek to encourage each student to reflect upon the material studied and then contribute to the discussion when he feels ready. Only occasionally do I make use of the 'cold call' technique. Instead, my strategy is to seek to create parameters that encourage proactive engagement. My role then becomes one of facilitating orderly discussion of assigned materials.

With this end in mind, I employ three basic policies. They include a 'first come, first served' rule; given that a key managerial responsibility is being appropriately proactive I generally ask students to initiate their participation in the discussion. In the interests of preventing the classroom from devolving into unstructured chaos, the second rule requires that entry into discussion occur by raised hand. The final rule attempts to facilitate the emergence of a competitive, yet compassionate classroom environment. It seeks to allow 'first helpings before seconds.' In practical terms this means that anyone seeking to participate for the first time takes priority over anyone seeking to participate for the second time.

Assessing the process

One of the critical end-of-term activities involved with this technique is for instructors to collect and synthesize the students' activities related to the five steps. What I have found to be most effective is to take approximately 20 minutes in the final class and have the students assist me by reporting their activities during the term. To facilitate the students' efforts, I have developed a "Summary of Course Activity" sheet.

First, I have the students deliver unsorted bundles of the pre- and post-class essays to one another. The timing of the essays' return to the students is not incidental. Given that my course generally include final projects that requires integrative review and application of the entire term's material, the essays facilitate a quick review. The students are then responsible to record their own totals for both pre- and post-class essays on the space provided.

The second step involves laying out the seating charts from each of the individual class sessions and asking the students to review the charts and tabulate, record, weight, and total their respective number of green, yellow and red name cards over the course of the term. The final step is for each student to record the number of check marks recorded on the sheets; tabulation of the check marks provides a useful reference point in the event students wish to challenge their class participation grade.

Given the ever-present possibility of students either intentionally or unintentionally reporting inflated essay and/or color name card counts, I announce at the beginning of this process that I may elect to undertake a random audit on one or more students' reported totals. Finally, I also require that each group of three students provide me with a completed summary sheet of their small group's meeting schedule.

CONCLUSION

We need to be reminded much more than we need to be taught.
- Samuel Johnson

Class participation is an extremely effective teaching pedagogy. However, it is not without its problems. In this article I presented a pedagogical approach that addresses several of these problems. The essence of the approach is to enrich the preparatory process through the use of several simple, but effective, steps including short pre-class essays and small group pre-class meetings. The approach also seeks to respect the dignity of all involved in the actual class-discussion process by providing students the opportunity to signal their comparative readiness to participate, rather than either sit in silent frustration or be called on when they would prefer to remain silent. Finally, the approach also seeks to facilitate student-centered integration of the course material that simultaneously prepares them for the course's final assignment, and, by extension, the demanding realities of today's workplace. Thus, to paraphrase the opening proverb, by writing, speaking, listening, and writing again, the students hears, sees, and does, and thus understands.

APPENDIX 1

HEADINGS OF DESCRIPTION OF CLASSROOM PROCESS INCLUDED IN COURSE SYLLABUS

1. BEFORE CLASS: ON THE USE OF ONE-PAGE PREPARATORY ESSAYS

1.1 Purpose of pre-class essays
1.2 Recommended method of preparing the essays
1.3 Email submissions
1.4 Concerning later pre-class essays
1.5 Concerning public reading of pre-class essays
1.6 Grading of pre-class essays

2. BEFORE CLASS: THE ROLE OF THE SMALL DISCUSSION GROUP

2.1 Purpose of Meetings
2.2 Grading
2.3 Other Details
2.4 Suggestions in Forming a Small Group

3. INTRO CLASS: ON THE USE OF COLORED NAME CARDS

4. INTRA-CLASS

4.1 On ‘warm invites’ and ‘cold calls’
4.2 Macro-recording of participation
4.3 Micro-recording of individual-specific participation
4.4 A note on note-taking and note-making
4.5 Grading: The instructor’s criteria for assessing class participation
4.6 Policy on class attendance
4.7 Student concerns about participation

5. AFTER CLASS: ON THE USE OF POST-CLASS SYNTHESIS ESSAYS

5.1 Purpose
5.2 Recommended Method
5.3 Email Submissions
5.4 On Late Essays
5.5 Public Reading of Essays
5.6 Grading of Essays

APPENDIX 2

SAMPLE OF CORE AND SUPPLEMENTAL READINGS AND ASSIGNED PRE-CLASS STUDY QUESTIONS

Core readings (for all students):

Core Reading #1: Wearever Workwear Limited (Bookstore Readings Packet)

Supplemental Readings (for specific pre-class study questions):

For members of Group 1: Mintzberg, H. (1981). "Organization design: Fashion or fit?" *Harvard Business Review*. January-February (Bookstore Case Packet)

For members of Group 2: Reich, R. (1992). "Entrepreneurship reconsidered: The team as hero." In *The Entrepreneurial Venture*. edited by W. Sahlman and H. Stevenson. Boston: Harvard Business School Publications. pages 49-60. (Bookstore Case Packet)

For members of Group 3: Gumpert, D. and D. Boyd. (1984). "The loneliness of the small-business owner." *Harvard Business Review*. November-December, 18-20, 22, 24. (Bookstore Case Packet)

Study questions for pre-class essays:

For members of Group 1: What is Mintzberg's basic thesis in **'Organization design: Fashion or fit?'** concerning organizational structure? How do you see it applying to small business? Why? What evidence supports your answer in **Wearever Workwear Limited**?

For members of Group 2: What does Reich mean by "the team as hero" in the article **'Entrepreneurship reconsidered: The team as hero'**? What would his view mean for how **Wearever Workwear Limited** might be managed?

For members of Group 3: What is the central message of **'The loneliness of the small business owner'**? What evidence, if any, can you see from the case studies covered to this point for the "loneliness" thesis? What evidence, if any, can you see from the **Wearever Workwear Limited** for the "loneliness" thesis?

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