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An Insider Perspective on Implementing the Harvard Case Study Method in Business Teaching*

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This paper provides practical guidance on the implementation of the CSM (case study method) using the HBS (Harvard Business School) model. The analysis is based on the first-hand experience of the author as a user and implementer of this mode of instruction. The results are further validated with surveys given to MBA (Master of Business Administration) students and interviews given to HBS faculty members. The idea behind the CSM is to simulate a real case business scenario with the surrounding facts and constraints. As it is the case in the real world, the students operate in an environment in which they assume the role of managers who maneuver under pressure and make decisions with the understanding that their decisions could result in irreversible consequences. Ultimately, the HBS method intends to condition the students to become future managers through the acquisition of a combination of functional skills (e.g., strategic management skills), conceptual skills (e.g., decision-making skills), interpersonal skills (e.g., teamwork skills) and leadership skills (e.g., communication skills).

Keywords: CSM (case study method), HBS (Harvard Business School), delivery strategy, teacher's role, students' preparation, classroom culture, students' assessment, classroom logistics

Introduction

The traditional teaching pedagogy (i.e., the lecture style) is a one-way communication flow emanating from an active sender (the teacher) to a passive group of receivers (the students). Its premise is based on the transmission of maximum information over a limited time period. In effect, the students are conditioned to learn the materials through transcription, memorization and repetition. According to Pablo Freire (1968), a famous pedagogue, a classroom delivery is an act of cognition rather than a mere transmission of information. In a meaningful classroom dialogue, "the teacher-of-the-students" and "the students-of-the-teacher" are replaced with new dynamics, namely, "teacher-students" and "students-teacher". Under this paradigm, the teacher and the students become partners in a process of shared learning.

The CSM (case study method) is an instructional method using the aforementioned partnership between the teacher and the students. The teacher assumes the role of the facilitator of a discussion rather than the sole provider of unidirectional information. The students practice, test, confirm, stretch, extend and refute existing concepts in the classroom as it would be the case in the real world. The intense intellectual and emotional

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involvement of the participants in the dialogue and the multidirectional flow of information (students-students and students-teacher) are the main hallmarks of the CSM and the most drastic and visible departure from the traditional lecture style. When successful, the CSM elevates the interaction of "teacher-students" and "students-students" to a higher order of critical thinking and learning in the Bloom's taxonomy than the traditional method of instruction. The ultimate experience is a sustainable learning experience that stays with the students for a long period of time.

Specifically, the HBS (Harvard Business School) model is unique in nature. The cases are rigorous and challenging in nature as they comprise complex and often convolute qualitative and quantitative information. The power of CSM predominantly applies to the teaching of managerial skills that encompass conceptual skills (such as decision-making skills), functional skills (such as financial acumen skills), leadership skills (such as communication skills), interpersonal skills (such as teamwork skills) and integration abilities (Jennings, 1996).

The paper is organized as follows: It first introduces the distinguishing feature of the CSM as developed at HBS (the authoritative institution for the development and teaching of CSM); it then discusses the roles of the students and the teacher in establishing a harmonious and value-added dialogue in the classroom; it also addresses how to evaluate students' performance; in addition, it highlights the salient logistical issues for the proper implementation of the CSM, such as the type of classroom, the seating of the students and the judicious use of technology; finally, it tackles some of the criticisms pertaining to the CSM effectiveness.

Background on the Harvard Model

The CSM was introduced at HBS in 1910 with the establishment of the new business school and following its successful implementation in the Harvard Law School. The early cases were relatively short, simple and based on practical business stories that faculty members would use to incite classroom discussions. The CSM takes the students out of the passive mode and forces them to be energetic participants in a simulated real world environment. Specifically, the CSM encourages group interaction inside and outside the classroom, while negating the students' option of "hiding in the crowd" inside the classroom. The cases then grew in sophistication in terms of content and learning objective. Nowadays, HBS is the undisputed authoritative institution in the development and dissemination of high quality business cases.

A typical HBS case consists of about 15 pages augmented with relevant appendices and tables. It provides a contextual basis for replicating a practical situation with all its conundrums, intricacies and dilemmas faced by managers (Barnes, Christensen, & Hansen, 1987a; 1987b). The cases are developed by the faculty members (with the help of carefully chosen research assistants) who collaborate with a variety of organizations of different structures, sizes and vocations. The students assume the role of managers who make decisions based on incomplete and imperfect information as it would typically be the case in the real world. The students are also held accountable for the quality of their decisions. Indeed, without adequate students' accountability, the quality of the classroom discussion would be greatly diminished. The real protagonists of the business cases may also be invited into the classroom (or via Webcam/video-conferencing) to add a lively component to the discussion. As such, this teaching mode is often compared to a form of choreography since the teacher first writes the case and then delivers it to the students.

Research Methodology

The term CSM is a broad title that applies to vastly different teaching techniques and objectives (Teach &

Govahi, 1993). Some of the variations of the CSM include simulations, problem-based learning and other experiential exercises. However, as it will be discussed subsequently, the CSM at HBS is unique in terms of classroom culture, teaching style, students' assessment, classroom logistics and other issues. To fully comprehend the intricacies of the CSM at HBS is not an easy endeavor by any means. It requires a vigilant scrutiny of the method based on the direct, long-term and continuous observations from both a student perspective and a teacher perspective. In other words, the proper analysis of the CSM requires first wearing a student's hat and then substituting it for a teacher's hat (i.e., first being as a user of the CSM, and subsequently, being an implementer of the CSM). This analysis is based on the unique insight of the author (via documented diaries and personal reflections) as a former HBS student. The author has experienced the HBS instructional method not only on an individual basis, but also more importantly in a group setting. Such a direct observational method provides a plethora of data on the characteristics, the strengths and the potential limitations of the Harvard method.

In addition, the author has administered surveys to 200 MBA (Master of Business Administration) students who have been given this mode of instruction. The survey participants were asked to evaluate the Harvard model on the following dimensions:

- (1) The sustainability of the learning method;
- (2) The extent which increased broadened the level of knowledge;
- (3) The motivation to acquire additional business knowledge;
- (4) The understanding/appreciation of business career issues;
- (5) The acquisition of further confidence and credibility during interviews;
- (6) The development of conceptual and integration skills;
- (7) The development of leadership skills;
- (8) The ability to maneuver in a teamwork environment.

The survey results and statistics are shown in Tables 1 and 2, respectively. Each question provides five alternative answers ranging from "Strongly disagree" to "Strongly agree" with scores ranging from -2 (for "Strongly disagree") to +2 (for "Strongly agree"). The key statistics (e.g., means, standard deviation, standard error of the mean, computed t value and cut-off t values at 95% confidence level) were then computed to assess the magnitude of the findings and the degree of consensus (or lack of) between the survey respondents.

However, as it is rightfully pointed out by pundits, the fact that students like a specific teaching methodology do not automatically mean that it is effective. Accordingly, the student survey results have been shared with ten HBS professors who are obviously intimately familiar with CSM and who can offer further insight on the methodology and its implementation. After carefully deliberating the findings, the following topics have emerged as issues of considerable importance in ensuring the proper implementation of the CSM:

- (1) Quality of the written cases;
- (2) Students' preparation;
- (3) Planning the classroom discussion;
- (4) Shaping the classroom dynamics;
- (5) Students' oral assessment;
- (6) Logistical issues.

These aforementioned topics are discussed subsequently.

Table 1
Survey Results

	Strongly agree (frequency)	Agree (frequency)	Neutral (frequency)	Disagree (frequency)	Strongly disagree (frequency)				
The following strategies enhance classroom quality of discussion and level of enthusiasm.									
It contributed to the sustainable learning of business materials.	45	55	47	35	18				
It increased and broadened my interest in the various business topics.		51	44	39	23				
It further motivated me to read business news and seek additional business knowledge.	62	48	44	28	18				
It enhanced my understanding/appreciation of business career issues.	66	70	32	21	11				
It enabled me to gain further confidence and credibility during interviews.		72	28	15	8				
It helped me develop conceptual and integration skills.	73	68	29	18	12				

Table 2
Survey Statistics

	Number of observations	Average ^a	Standard deviation ^a	Standard error on the mean	Computed <i>t</i> -value	t critical b
It contributed to the sustainable learning of business materials.	200	0.37	1.26	0.09	4.15	200
It increased and broadened my interest in the various business topics.	200	0.26	1.31	0.09	2.80	200
It further motivated me to read business news and seek additional business knowledge.	200	0.54	1.30	0.09	5.85	200
It enhanced my understanding/appreciation of business career issues.	200	0.80	1.17	0.08	9.58	200
It enabled me to gain further confidence and credibility during interviews.	200	0.98	1.09	0.08	12.61	200
It helped me develop conceptual and integration skills.	200	0.86	1.18	0.08	10.26	200

Notes. ^{a.} The following conversion scores were used: Strongly agree = 2; Agree = 1; Neutral = 0; Disagree = -1; Strongly disagree = -2. b. For 95% confidence level (two-tailed).

Quality of Written Cases

The quality of the written cases (and the corresponding teaching notes) greatly influences the nature of the information exchange in the classroom. If the cases are well written and if the participants (teacher and students) come thoroughly prepared to class, the resulting classroom environment could quickly become emotionally charged. There are no simple solutions to the cases. However, good cases stimulate a dynamic exchange of ideas and perspectives, such as countering and defending positions and building on each other's perspective and idea. For example, the students may have to answer the following questions:

(1) What should a software company do in an effort to keep on growing and gain market share?

- (2) How should a beverage company refocus its strategy and reposition its products in an effort to increase its profit?
- (3) What are the strategies a manufacturing company should formulate and implement in the face of increased competition from China?

The cases should not only be interesting and they should also carry a meaningful message that could be applied to a practical business setting and be transposed or extrapolated to other business scenarios. In addition, they do not contain analysis or conclusions and often require making decisions based on incomplete information on complex business dilemma, which is a common occurrence in many real life situations. Accordingly, the writing cases vastly differ from the writing of research papers in terms of substance, methodology, form and style. The characteristics of the good and effective business cases (those that are conducive to sustainable learning) are highlighted in the Table 3.

Table 3

Attributes of Good and Effective Business Cases

- (1) They have pedagogical utility: They are not just written for entertainment purposes, but also for the underlying message that they ultimately carry. The narrative calls for higher order cognitive learning goals in the Bloom's taxonomy, such as generating new ideas, justifying a decision, dissecting information, synthesizing findings, deconstructing ideas, interrogating assumptions, finding solutions and implementing plans. The narrative also encompasses affective learning goals, such as receiving and attending, responding, organizing and internalizing values.
- (2) They are original: The most effective cases are those that offer the most counterintuitive solutions and surprise the audience.
- (3) They are well-written: The good cases should have impeccable and yet simple language. More importantly, they have the right structure in terms of the flow of ideas and the connection between one paragraph and the next. In other words, the effective case studies should make sense to the audience.
- (4) They are stimulating: They must tell a story that arouses the students' interests. They are not simply a descriptive piece, or a snapshot of life. They should include an interesting plot with a beginning and a middle section. More importantly, there should be drama and suspense involving a clash of ideas and, at times, a clash of people.
- (5) They are decision-forcing: They force the students to put themselves in the shoes of the central characters and feel empathy with them.
- (6) They call for the generalization of practical learning: The emphasis is not only academic-based (to know theory), but also practitioner-based (to act or adopt a specific behavior). For instance, students learn how the principles translate into specific behavioral practices, followed by the actual implementation of those practices. The cases also call for the generalization of concepts beyond their specific focal or familiar contexts.
- (7) They are relevant to the students: They involve controversial situations that the students know or are likely to face as a manager or a leader in a rapidly changing business environment. As a matter of fact, business cases are in many respects similar to medical cases. Both can be considered as intellectual puzzles that require rational solutions to a real problem or a dilemma. Unlike medicinal cases, however, the solution of business cases does not call for an ultimate right or wrong answer. Rather, the good answers/decisions are those that are based on thoughtful, elegant, creative and ingenious reflections.
- (8) They are situational dependent: The nature and complexity of the cases depend on a number of factors including the maturity of the students and the size of the class. The case studies should gradually increase in complexity as the students become more knowledgeable about the material.
- (9) They are based on a timely topic: They should address challenges that current organizations are facing in a constantly evolving and dynamic environment.
- (10) They have sufficient details: They should be detailed enough so that students could delimitate between useful and irrelevant information. They should also be broad enough to integrate various disciplines while focusing on the relevant theme. However, exceedingly long cases could bore the reader and render the analysis overly tedious.
- (11) They are supplemented with thoroughly prepared instructor notes: The case studies should also be accompanied by clear, concise yet complete instructor notes (only available to instructors and not to students). The writing of good instructor notes requires intensive effort (above and beyond the writing of good case studies) to ensure an impassioned, yet organized and focused debate in the classroom.
- (12) They include additional background materials when needed: The case studies may also require supplemental notes/backgrounds that assist students in appreciating the theoretical background of the case. In effect, theory informs practice. It is often required to have the students first understand the underlying theoretical principles prior to analyzing the cases.

Students' Preparation

The analysis of a case by the students is not an easy endeavor. It requires intense intellectual effort at the individual level and at the group level. The cases take significant amount of time to read as they are lengthy, highly complex and typically contain a plethora of financial and non-financial data, some of which may very well be irrelevant as it would be the case in the real world. The students first read the case individually for at least a couple of hours to understand the salient details. The students then meet in groups (typically four to five individuals) for another couple of hours to further dissect the case and refine the analysis. Of course, the study group is a voluntary initiative. Some students may be reluctant to coordinate and depend on others. They probably feel they could perform better and faster alone than being a part of a team endeavor. Although working with others is a prior not easy (particularly in terms of coordination and logistics), teams could accomplish more creative work in less time than the same number of students working on an individual basis. Some students may also decide to form virtual teams using synchronous (real-time interactions) and/or asynchronous (non-real time interactions) digital collaborations via modern computer technologies to accommodate individuals who might not be available. The skills that are required by the team encompass technical (functional expertise), problem-solving and decision-making skills, conceptual skills, administrative skills and interpersonal skills.

The group composition is also an important determinant for its effectiveness. Broadly speaking, there are two types of groups based on composition, namely, monolithic groups and pluralistic groups. A monolithic group consists of highly homogenous students with the same educational background, ethnic group, gender, religion and others. A pluralistic group consists of students from different educational, gender, racial or cultural backgrounds. The students typically feel more comfortable with monolithic groups, because there is a high degree of cohesiveness among the students. In addition, a homogeneous group is typically characterized with better communication, less mistrust and tension (including less stereotyping) than a pluralistic group. In the short term, a homogeneous group typically outperforms a pluralistic group. However, with the passage of time, a pluralistic group with large cultural and functional integration could surpass a monolithic group in terms of creativity and innovation, because people from different backgrounds have diverse perspectives on issues. In addition, a highly diverse group minimizes the occurrence of groupthink behavior (or herd mentality).

Planning the Classroom Discussion

Although the students spend a considerable amount of time rehearsing alone or in groups, the real action takes place in the classroom under the leadership of the teacher. The teacher sets the tone, the culture and indeed the collective identity of the class. So, what should be the teacher's behavior to ensure high performance norms in the classroom? First and foremost, the degree of planning for the incoming discussion is an essential ingredient, even more than the traditional teaching method. Specifically, the conscientious teachers review the content of the case study over and over again before stepping into the classroom. They use mental and physical rehearsal to build confidence and assess the pace and the timing of the material. They put themselves in the shoes of the students by asking the question "so what" about everything they plan to do. They ought to develop a feel for the audience using experience, intuition, inspiration and personal judgment. It is noteworthy that there are different behavioral roles that could be used by the teacher (such as a facilitator, a coach, a demonstrator or a quarterback) depending on the professional and psychological maturities of the students (Dooley & Skinner,

1977).

It is important for the teacher to condition the students for the incoming class discussion. As such, the students should be provided with case materials well in advance of the class meeting to have sufficient time to digest the readings and indulge in an exercise of self-reflection. Typically, the teacher opens the discussion by cold calling one student to describe the situation and suggest a course of actions. The themes of the problem are typically highlighted on the board by the teacher and with the help of the students. Thereafter, the teacher orchestrates the entire group dynamics by calibrating the tempo of the discussion (akin the chief conductor of an orchestra) by probing the students' answers and pitting one student against another.

The process of managing the questions and answers is important in this regard. The ingenious teachers do not interject too often, but they rather actively listen to the students' comments and they judiciously gear the dialogue in the direction that will help them best achieve the learning goals. They also ask scrutinizing, open-ended questions as opposed to closed-ended questions that call for short answers. Actually, the most thought-provoking questions are those that are counterintuitive and stimulate the curiosity of the class. While asking the questions, it is essential for the teacher not to interrupt or dominate the group discussion, but rather actively listen to the students' comments and link one idea to the next. It is suggested that in a science learning context, long discussions tend to openly expose the diverse viewpoints of the students, thus, promoting an environment propitious to deep learning (Glynn & Muth, 1994). In addition, the teacher should guard against the temptation to interrupt the dialogue and turn the discussion into a one-way lecture. Nonetheless, the teacher should intervene to prevent a discussion to go flat or take a wrong turn. Otherwise, such behavior will inevitably result in frustrated or perplexed students. Finally, the teachers should bring the issue to a grandiose closure. Indeed, most students want a synthesis of the substantive fragments and tidbits of the discussion so that they could meaningfully digest the learned concepts.

Shaping the Classroom Dynamics

What makes the CSM so unique in its delivery approach is that the teacher must develop a feel for the audience using intuition, inspiration, experience and personal judgment while fulfilling the multifunction of an organizer, a motivator, a leader, an instructor and an evaluator. As such, the role of the teacher is in many ways akin to the one played by an actor. The teacher (like the actor) should have passion. The issues that are taught passionately are very much likely to be remembered by the students. Conversely, the concepts that are delivered without emotion are likely to be forgotten. The 18th century British actor Colley Cibber puts it best when he says the following: "He that feels not the passion he would raise will talk to a sleeping audience". And like the actor, the teacher should capture and sustain attention via verbal and non-verbal communication channels that appeal to the various learning senses, such as voice, body and emotion. Specifically, they show a high level of enthusiasm and humor and exhibit a high level of energy by maneuvering around in the classroom with ease and elegance and naturally transitioning from the traditional blackboard to the more technologically advanced delivery styles (e.g., visual aids, movies, simulation games, etc.). The Russian theatre director Meyerhold referred to movement as "the most powerful means of theatrical expression". Unlike the actor, however, the teacher uses the element of spontaneity to further stimulate the dialogue and capture students' attention. Spontaneity increases the active listening of students because it judiciously injects the element of surprise in a discussion.

The success formula hinges on having excellent participants (meaning teachers and students) working in

concert with each other. The quality of a contribution is certainly more desirable than the quantity of the contribution. Some students are not very vocal, yet very effective in supplying high quality information. Such students demonstrate a keen ability to express structured arguments with ease and elegance. Based on his own experience as a former HBS student, the author of this paper could ascertain with certainty that some of the classmates comments still reverberate in his mind until today, which is a powerful testimony of the sustainable learning of the CSM.

Specifically, the quality of the class discussion depends on the professional and psychological maturity of the students: Basically, the two important factors to consider are the following:

- (1) Motivational factors: Are the students willing to contribute to the classroom discussion? It is essential to hold the students accountable for the dialogue in the classroom. Otherwise, they would have no incentives to neither come prepared to class nor feel accountable for their active and value-added involvement in the dialogue;
- (2) Cognitive factors: Are the students able to discuss the issues at hand? It is preferable (though not a requirement) that business schools select MBA students with at least two years of relevant business experience.

In this respect, the attentive teacher assigns roles to the students based on their knowledge, beliefs and interests. Research has shown that students are motivated to participate in a discussion if they are allowed to capitalize on their natural tendencies to connect the material with personal experience (McCombs, 1991). The gathering of data on students' background is an important issue that should take place at the earliest possible stage of the learning process.

Students' Oral Assessment

The advance preparation of the students is a crucial ingredient in the successful implementation of the CSM. In this respect, it is extremely important to hold the students accountable for the extent and quality of their oral participation in the classroom. At HBS, the oral participation of the students typically accounts 50% of the final grade for the course in a classroom containing approximately 80 students. Undeniably, the success of such individuals in the real world largely depends on their oral communication skills and the CSM is an effective method to prepare them for future managerial challenges.

The delimitation between the high-performance contributors from the rest of the crowd is driven by the unique ability of the individual to do the following:

- (1) Analyzing and synthesizing information through advance preparation;
- (2) Sharing and disseminating critical information while providing elegant, systematic and convincing arguments;
 - (3) Exhibiting active listening skills and relating to the different points of views expressed in the classroom;
- (4) Distinguishing between facts and inferences and infuse new ideas in the discussion or raising new questions that call to further thinking.

The teacher should assign grades to the students' performance on the spot or immediately after class. This exercise would enable the teacher to judge at a glance the quality and quantity oral contributors. Thereafter, the teacher should periodically inform the students about their performances and future improvement strategies. Broadly speaking, a teacher may encounter three categories of students based on the extent of their oral contributions:

(1) The outstanding participant: The student has done his/her homework prior to coming to class. As such,

the class participation reflects thorough knowledge of the case including the text and the exhibits. The ideas are interesting and offer substantial insights to the discussion at hand. The arguments are systematic, well-documented and persuasive. In addition, the comments show that the student is an excellent listener and is able to integrate different perspectives. If this student was not present in the classroom, the quality of the discussions would be adversely affected;

- (2) The unsatisfactory participant: The student has not done his/her homework prior to coming to class. Accordingly, the participation reflects inadequate knowledge of case facts and/or other key concepts from the readings. The proposed ideas are seldom interesting and often irrelevant. This person is a poor listener and does very little to further the thinking and potential contributions of others. As a matter of fact, this participant has wasted some valuable time in the classroom. If this person were not present in the classroom, the quality of the discussions would be improved;
- (3) The non-participant: This person has remained silent and accordingly has not contributed to the class discussion. This person is a free-rider because he/she has benefited from the input and courage of others but has offered little in return to their contributions. If this person were not present in the classroom, the quality of our discussion would be unchanged.

Logistical Issues

During the first year of the MBA program at HBS (the required curriculum), the students are grouped into different sections (labeled as Section A through Section J for instance), each comprising about 80 students. The section dynamic introduced at HBS promotes a distinctive and deep-rooted culture that favors substantive and experiential learning while encouraging teamwork and cooperation. The classroom arrangement should be conducive to the group discussions for the proper implementation of the CSM. Ideally, the classroom is akin a Roman amphitheatre with different levels and the teacher principally maneuvers down in the central arena (or the performing stage). In other words, the classroom uses fan type seating that allows students to see and communicate with each other from any vantage point in the room. This configuration also allows students to easily switch back and forth from listening (passive role) to participating (active role). The students are also provided with pre-assigned seats for each of the two semesters of the first year. The students should clearly display their names in front of them in the classroom. The ease of students' identification would greatly facilitate the ability of the teacher to instantaneously register and give due credit to those students who positively contribute to the class discussion. As a matter of fact, the teacher would have gathered a lot of data and learned a whole lot about each and every student capability halfway through the semester.

Technology should be viewed as a complementary tool in the CSM and certainly not as an alternative teaching methodology. All the visuals, the graphics, the live database, the clickers and other technological tools should support the learning goals and not distract from a meaningful classroom discussion. Specifically, the utilization of PowerPoint presentations should be limited to a small finite period of time, such as summarizing the key findings of a case during the last five to ten minutes of the class time. Otherwise, it would inevitably hamper the well-functioning of the group dynamic. At the extreme case, technology may even hinder on the learning process and mitigate the intellectual curiosity of the students (Clifford, 1999). One should not, however, underestimate the power of computer modeling in stimulating classroom discussion (Finch, 1993). For instance, the utilization of a live Excel sheet is a very powerful tool to illustrate the different scenarios of

paradoxical data sets with conflicting perspectives through direct and vicarious demonstrations requiring analysis, synthesis and evaluation.

Some Criticisms of the CSM

The extent of effectiveness of the CSM in teaching functional skills (such as statistics, accounting, finance, operation research just to name a few) is a hotly debated issue among academics (Argyris, 1980; Berger, 1983; Romm & Mahler, 1991). However, there are documented situations in which the CSM has been highly effective in teaching highly theoretical and quantitative topics, such as accounting and taxation (Sawyer, Tomlinson, & Maples, 2000). A survey of the members of the Academy of Management in the mid 1980's revealed that the CSM has become a very popular teaching method in courses of business policy and strategic management (Alexander, O'Neill, Snyder, & Tounsend, 1986). In addition, some students may not appreciate the CSM and the cold calling strategy, because it forces them to speak in the classroom. They believe that this situation is uncomfortable (such as fear of public speaking) and create unwarranted stress (particularly cold calling the students in the classroom). The counterargument is that exams, projects and assignments are not optional. So, why should participation be voluntary? More importantly, the CSM is intended to prepare the students to future managerial and leadership positions. Indeed, managers, leaders and followers are constantly forming opinions and judgments about verbal statements made by peers, superiors, subordinates and outside constituents. There is no reason as to why this formula could not be duplicated in a classroom environment. In any case, there are some techniques that could be used to increase students' participation and lower their anxieties in the classroom (Haynes & Helms, 1993).

There is skepticism as to whether or not the CSM could be adapted to large undergraduate courses. It may be argued that, when the class size is too small (below 20 students), there is not enough diversity of opinion. Conversely, it may be argued that when the class size it is too large (above 80 students), the assessment of a student participation becomes more complex and intricate. However, the CSM has been used highly effectively with class sizes up to 100 students at HBS. There are also academic evidences in which the CSM has been successfully adapted and implemented in undergraduate courses with large class sizes (Booth, Bowie, Jordan, & Rippin, 2000).

Like any other simulation method, there are concerns about the transfer of learning of the CSM. The transfer of learning refers to the effectiveness by which the knowledge, skills, behavior, and cognitive strategy could be transposed from the virtual world (i.e., the classroom) to the real world. The closer the CSM depicts an accurate rendition of actual events with the surrounding facts and constraints, the easier the transfer of learning, because there is high physical fidelity (meaning the CSM replicates the real situation in terms of physical attributes). However, the CSM could lack in psychological fidelity, meaning that the behavior, the emotion, and indeed the state of mind, of the individual is different in the real world than it is in the classroom. As a matter of fact, the degree of risk aversion is expected to be much higher in actual situations involving actual loss of wealth and actual managerial accountability than in a virtual world. Nonetheless, the CSM attempts to increase the psychological fidelity, because the student is under intense stress to perform in the classroom. As stated previously, the student is accountable for a decision because a significant portion of the grade is based on the quality of the class participation.

Conclusions

What distinguishes the Harvard method from other delivery strategies is that it has sustained the test of time. The CSM has enjoyed a distinguished tradition at HBS for almost a century now. It has been experimented and refined over a prolonged period of time. Indeed, lessons have been learned and processes have been fine tuned to improve the delivery of the CSM. In fact, the CSM is so scrupulously followed at the institutional level that it would be unimaginable to disconnect this distinctive teaching delivery mode from the HBS culture. It is noteworthy that the CSM implementation is not an easy endeavor by any means. It requires enormous dedication and creativity from the teacher, the students and the academic leadership to establish the right culture, the right delivery mode, the right assessment technique and the right logistical support.

Of course, some educators and students may be disappointed with the CSM as it may not always yield the desired results (i.e., achieve its learning objectives). The reason for this occurrence is not due to intrinsic factors related to the CSM per say, but rather due to poor implementation. Without the proper resources, dedications and support from the leadership (physical and psychological), the implementation of the CSM formula would inevitably yield suboptimal learning results, and in some cases, could have negative repercussions on the learning process.

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